THE CHEMIST & DRUGGIST

STEPT EIVER

Businesses Wanted. Businesses for Disposal. Premises to Let. Anotica Sales.

SATURDAY, APRIL 20, 1889.

Partnerships. Situations Vacant. Situations Wanted.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

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30.—£600.—HANTS.—Seaside; Retail, Dispensing, and Prescribing; returns nearly £600 yearly; net profits over £300 (proof given); good house, large garden, greenhouse, &c.; price about £600.

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Nice Town, Kent*	13	yrs.		5	yrs.		£380		£32		8		£250
Lancashire Coast*		22	٠.	5	"		300		37				250
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Peokham, S		33	• •	-	22	4 4	450		€0		7		325
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North London		22	• •	1	22		300		45		6		180
Country, Kent		23		15	33		600	٠.	60		8		550
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Pimlico		22		14	"				60		10		300
Bradford		22	٠.	20	2%		900	٠.	40		12	val	luatu
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2600 or valuation.

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must increase.

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ANTED. Junior, about 20; must have been accustomed to I ondon trade, and welte neat hand. Apply, with full particulars, to M. A. KLORI, Office of The Chemist and Druggist, 42 Cannon Street, E.C.

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ANTED, an Assistant at once, outdoors, with good experience; easy hours; no Sunday duty; please state full particulars, and enclose photo, to be returned. Address, "Chemist," 88A Northgate, Wakefield.

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the Professor of Chemistry at the Royal Military Academy, Woolwich (25-30). 28th April. The date specified is the latest at which applications can be received. They must be made on forms to be obtained, with particulars, from the Secretary, Civil Service Commission, London, S.W.

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JUNIOR; Dispenser or Counterman; aged 22; 4½ years' experience; W. 17 Upper King Street, Leicester.

UNIOR; aged 19; tall; 4 years', Dispensing and Retail; London preferred. H. W., 91 Pembroke Street, Devonport.

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A COMPETENT Junior Assistant desires an engagement in a first class Drug house, Wholesale or Retail; would accept a situatic abroad. Address, 89, Office of THE CHEMIST AND DRUGGIST, 42 Canno Street, E.C.

WHOLESALE or Retail; varied experience in both; highest references; aged 21; good appearance and address, and an abstainer, Apply, X. Y. Z., care of Me-srs. Jno Richardson & Co., Wholesale Manufacturing Chemiats and Druggists, 10 Friar Lanc, Leicester.

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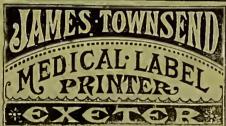
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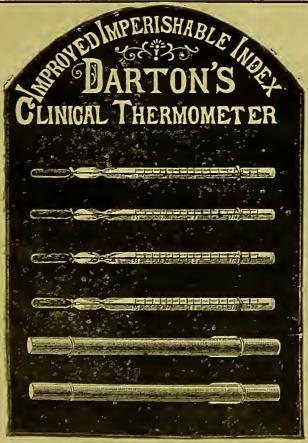
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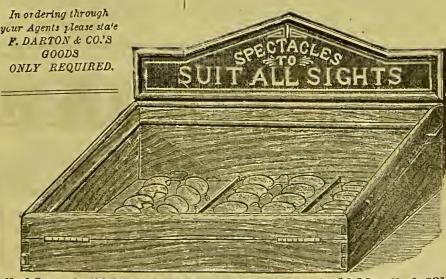
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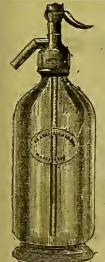
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JOHN MULLEN, Resident Medical Officer.

ONLY PREPARED

ROBINSON, THE LABORATORY, PENDLETON, MANCHESTER. **BENJAMIN**

N.B .- A Sample Bottle sent FREE on receipt of Professional or Business Card.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c. A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District-H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

APLAN

MEMISTS' & GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, &c., 6 GREAT TURNSTILE, LONDON, W.C.

Printed in Colours, on White and Coloured Paper, for Chemists' Advertising. A Great Novelty.

COUNTER

CROWN OCTAVO BILLS 10,000 $(7\frac{1}{2} \text{ in.} \times 5 \text{ in.})$ **12/0** $(9 \text{ in. } \times 5\frac{1}{2} \text{ in.})$ OCTAVO BILLS DEMY 10.000 ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.

For the Water Cloet. In Registered Shape Boxes and in Packets. Samples and Prices on application.

B. REFINEO (in 2-lb. cakes in cases 130 lbs. 1-lb., \frac{1}{2}-lb., and oz. cakes W. H. B. WHITE {pnt up in 2-1b, parcels in cases of 54 lbs.

The purity of these goods is certified by the following eminent chemists: S. P. Sharpless, Sta'e Assayer, Boston: J. W. Taylor, Associate of the Society of Public Analysts of Eng., Montreal, P. Q; Edward Davies, F.C.S. and T. I. C. and C.. Royal Institution. LIVERPOOL, Eng.; Bernard Dyer, D.Sc., F.C.S., F.I.C., Member of the Society of Public Analysts, 17 (Feat Tower Street, LONDON. E.C., Eng.; Wm. T. Wenzel, Analyst and Assayer, San Francisco, Cal., and may be obtained of any of the leading Wholesale Druggists in the Northern and Midland Counties.

CRUDE BEESWAX,

Foreign and Domestic.

CERESINE,

Yellow and White.

PARAFFINE WAX, Refined, all Grades.

We will deliver our goods in 5-cwt. lots ex quay, in any city which is the Terminus of a Steamship Line throughout the Kingdom, without i rouble or expense to the Buyer.

CABLE ADDRESS_"BONDLEAR BOSTO

OZOKERITE, In Bales.

CARNAUBA, or BRAZIL WAX.

JAPAN WAX

W. H. BOWDLEAR & CO., BOSTON, MASS., U.S.A. Office and Warehouse-36 CENTRAL WHARF.

18

TO THE

CHEMISTS & DRUGGISTS SYPH

GREAT BRITAIN.

TELEGRAPHIC ADDRESS: COLEMAN. GEORGE'S, NORWICH.

St. George's, Middle St. NORWICH, December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, WITH QUININE, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable In order further to meet the quantities. requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, NON-Alcoholic, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be SOLD WITHOUT A WINE LICENCE. orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each. Trade prices on application.

P.S.—Where the Licence is not held we are willing to pay the entire cost of a Retail Licence (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine WITH-OUT QUININE commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS-

COLEMAN & CO., LIMITED,

ST. GEORGE'S, NORWICH, AND 3 NEW LONDON STREET, LONDON, E.C.

THE "LONDON-MADE"

Obtained the HIGHEST AWARD at the International Health Exhibition, London, 1884.



The high reputation this bottle has achieved is due to the fact of its is due to the fact of its being in every particular the most perfect yet introduced; and when compared with others in the market it stands pre-eminent. It is most simple in its working parts, therefore the least liable to get out of order; it is the most easily opened, the lightest pressure on the lightest pressure on the handle being sufficient; it produces a more highly-charged gaseous water than is usually water than is usually obtained from syphons; it compares most favourably in appearance with any, and, the metal top being entirely free from lead, the prejudice against syphon drinks is at once removed, as the liquid passes over pure tin only.

All our Syphons are now fitted at the base with a groove, so that drips from the spout that run down the sides are prevented from soiling the table. See drawing.

NOTE ... Syphone made with our patent foot for collecting excess of liquid dripping from the sponi after use are supplied at after use are supplied at no extra charge, and will be found of great ntility in preventing stains, &c., npon table linen. This is a desideratum long been wanting, particularly for privatehouse use. Send for sample; forwarded npon receipt of 2s.

Any name, crest, or trade-mark put on the glass by an improved acid process, at from 18s. to 24s. per gross. There is a three-fold advantage in this, as it forms a continual advertisement, is a great or present, and a great ornament, and preventive of fraud. T plate for engraving costs extra from 5s. upwards, according to the artistic device required.

PRIORS (WHITE, BLUE, GREEN, OR AMBER):-Less than I gross, per doz. £1 4 0 1 3 0 1 2 0

Chart size

Pint size

Pint size

Half-pint, Pear shape

Ootagonal vases, any oolonr (including Azure Blue)...

Logs, nickel-plated, from 5s. 5d. per doz. extra. Tops, silver-plated and burnished from 9s. por doz. extra. A charge is made for packing, except when ordered in our patent bin cases (holding one dozen each, price fs. 5d. each).

Please Note...B. & F. are the only firm manufacturing Syphons in England that do not supply them filled, and so compete with their customers' trade.

MINERAL WATER ENGINEERS,

Manufacturing Chemists, and General Providers for the Aërated Water Wine, Beer, and Cyder Trades,

"Niagara Works," 26^x Eagle Wharf Road, London, N. Send for Price List of Soda-water Machinery and Accessories.

EIGHT PRIZE MEDALS AWARDED

HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

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GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In $\frac{1}{2}$ - and 1-pint boxes, 3d. and 6d. each.

PROPRIETORS-GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES

DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.



ARTHUR HILL HASSALL, M.D., LOND.,

Author of "Food: Its Adulteration and Methods for their Detection."

EDWY. GODWIN CLAYTON, F.I.C., F.C.S.

Chemical Laboratory, 54 Holborn Viaduct, London, says:—

We have analysed a sample of the "Liebig's Extract of Meat and Malt Wine" manufactured and supplied by Messrs. Hassall & Co., and have found this preparation to contain considerable proportions of the valuable and characteristic constituents of Extract of Meat, in combination with Port of good quality and Extract of Malt. The amount of combined phosphoric acid present is large, and the results of the analysis in general have been of a very satisfactory character. This article possesses an agreeable vinous flavour, and we are enabled from the results of our analysis to pronounce it a valuable and very good preparation of Meat Extract, Wine, and Malt.

Sold Retail, in Bottles at 2/9 and 4/6 each.

Cost of Retail Wine Licence will be allowed on a 6-dozen order.

Supplied in bulk at greatly reduced prices.

Special arrangements made to supply the Wine in Bottle, with attractive Labels, Circulars, and Handsome Framed Show Cards, with Buyers' own name upon same, free of charge.

May be had prepared with choice Port (Oporto Wine), Sherry, Claret, or superior unfermented juice of the Grape (non-alcoholic), with or without Quinine, Pepsine, or Iron, as desired, at same prices.

This preparation proves its superiority over all others of a like kind, wherever it is introduced, and is becoming every day more prescribed by Medical gentlemen to take precedence as the most perfect form of concentrated nourishment.

We will send a sample, carriage paid, to any address on application, as we feel sure no idea can be formed as to what degree of perfection has been attained until this preparation is tried.

List of Testimonials, copy of Analyst's Reports, and Trade Prices on application.

HASSALL & CO., 7 ST. ANN'S STREET, MANCHESTER,

BARCLAY & SONS, LIMITED, LONDON.

E FOR CHI

The Proprietor will forward, carriage paid, on receipt of Postal Order, 4s., 1 dozen 6d. bottles of this Popular preparation for making

together with One Thousand Pictorial Handbills printed in colours on fine tinted paper, being a series of 16 copper-plate



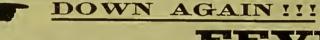
views of scenes from the famous "Dukeries" of North Notts.
These Handbills are a high-class example of the printer's art, and are retained by the public for the beauty of the pictures, and thus cause a demand for the preparation wherever introduced. This exceptionally favourable offer can only hold good until 31 May, 1889.

The Proprietor is induced to make this offer that the preparation may become more widely known in parts where it has not yet been introduced, his experience showing that where once known and used a large demand has been created and maintained. Chemists who are alive to the requirements of the times will see that it is greatly to their advantage to keep this well-known Extract, rather than be at the trouble and expense of putting up a preparation themselves. Customers' names printed on the handbills. Specially favourable terms for larger quantities may be obtained from the Proprietor,

> MANSFIELD. NOTTS.







SELTZ

Caned, each ...

2 PINT. 3 PINT. 7/ 8/ 3 PINT. 2 PINT. 6/6

12/5

8 PINT. 20/9 8 PINT.

Wired, each ... \$2 worth or more, 5 per cent. discount.

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C. Telegraphic Address-"FEEDING BOTTLES LONDON."

& F. J. TAYLOR'S



Newport Pagnel.

SODA, POTASH, SELTZER, AERATED (without Alkali), and LITHIA WATERS, LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature of the Firm.

Purity and Excellence of the Water certified by Analysis by Professor ATTUILD, Ph.D., F.O.S.

RANDALL'S

Plain Black Currant, old square 2/6 | Black Currant Voice (warm Plain Black Currant, rough oval 2/6 Black Currant and Ipecacuanha 2/6 Black Currant Cough Lozenges* 3/6
Black Currant and Tannin .. 3/ *Ipecac. & Morph., strength as "B.P."

astringent)

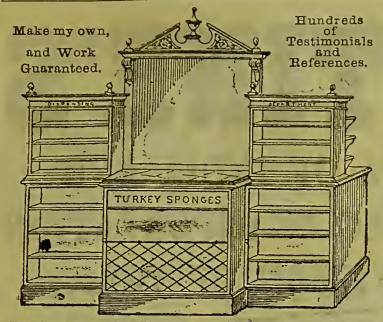
In Bottles, 1-lb., 2-lb., 4-lb., and 7-lb. For Exportation, in Soldered Tins, of any size. From EDWARDS, London, or SANGER & Sons; through any Wholesale House; and from the Manufacturers,

RANDALL & SON, SOUTHAMPTON,

Who will forward Samples by post on application.

Also Brown Cough Lozenges, 2/; 7 lbs. stamped with name free, and Musk Lozenges (Special), 2/6.

N.B.—Medical Lozenges of every kind, including those of the Pharmacopæia of the Hospital for Diseases of the Throat, London, made with Black or Red Currant.



The above represents a Plate-glass and Mahogany Dispensing Screen and Counter. The cases on each side of the marble slab over sponge case have silvered glass backs, and are fitted with movable shelves; the cases in front of counter are also fitted with movable shelves. The mahogany used is beautifully figured. At back under counter fitted with Drawers for Corks, Labels, Paper, &c., &c., and the back of screen with three shelves the entire length for Bottles.

6 ft. long, complete, £16; if Screen only, without Counter, £8 10s.

ELKANAH NATALI

SHOW CASE MAKER AND SHOP FITTER,

207 OLD STREET (Shoreditch End), LONDON;

Workshops—HENSON STREET, E.C.

(ONLY ADDRESSES).

No connection with any other house of the same name PLEASE ADDRESS IN FULL.

TYRER'S VALUE SAUCES "BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.

LARGEST IN THE TRADE.
In Half-Gross Boxes, at 6/6 per Gross.

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE OR READING SAUCE.

ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.

A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER, The "Borough" Ketchup and Sauce Maker,

70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.

Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.

BURGOYNE & CO., 16 Coleman Street, London, E.C.

JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

THE ORIGINAL GENUINE

EAST INDIA OIL OF MUSTARD SEED

Is strongly recommended as a safe and effectual remedy in cases of

RHEUMATISM, GOUT, RHEUMATIC GOUT, SCIATICA, LUMBAGO, HEADACHE, PAINS IN THE STOMACH, SPASMS, BRUISES, CHILBLAINS, &c.

RETAIL IN BOTTLES, 1s. EACH.

Imported by J. H. & S. JOHNSON, Wholesale Druggists, 6, 8, and 10 WHITECHAPEL, LIVERPOOL.

Wholesale Agents: London—Newbery & Sons, and Bourne, Johnson & Latimer.

TOBACCO

CIGARS & CIGARETTES.

M. & R. PEACOCK,

Tobacco, Cigar, & Cigarette
Manufacturers,

KINGSLAND ROAD, LONDON, E.

Special Packed Tobaccos

"ROYAL CHARTER"

AND

"UPPER CRUST."

Sold in Packets only.

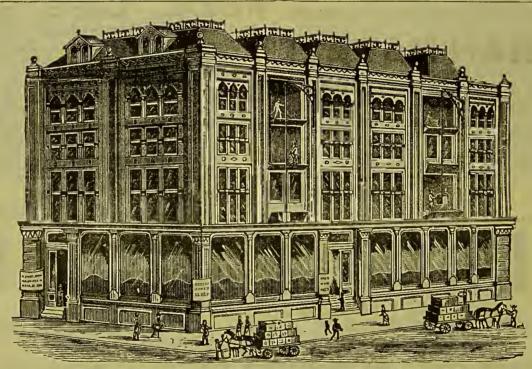
Those who deal in these Goods, or intend doing so should write to the above Manufacturers for Price List.

HESELTINE'S

THE PREMIER TEA OF INDIA AND CEYLON, IS THEIR SPECIAL IMPORTATION AND THE PERFECTION OF TEA.

REGISTERED

"TAPRABUNDA" TRADE MARK.



OFFICES AND DUTY PAID WAREHOUSES.

For Retail at 1s. 8d., 2s., and 2s. 6d.

In Lead Packets, ½lb., ½lb., and 1 lb.

Terms of Agency, and Samples of the Tea, on application.

WM. HESELTINE & SON,

56 Wilson Street, and 1 & 3 Earl Street, Finsbury,

LONDON, E.C.

AGENTS WANTED WHERE NOT ALREADY REPRESENTED.

Telegraphic Address-"TAPRABUNDA LONDON."

APPOINTMENT of AGENTS.

UNITED KINGDOM TEA COMPANY, LIMP

DIRECTORS.

EDWARD TETLEY, Esq.
JOHN EDWARD TETLEY, Esq.

WILLIAM HENRY TETLEY, Esq. JOHN LAYTON, Esq.

JAMES FISH, Esq., J.P. (Mayor of Blackpool).

The Directors are entertaining applications for the Agency for the sale of the Company's Teas. A liberal Commission will be allowed. The appointments will be found to be most valuable, entailing little, if any, trouble to the Agent, in addition to which, from the very extensive nature of the Company's advertising all over the country, the appointment will be the means of bringing large numbers of customers to him, who, when buying the Teas, will at the same time patronise his general business.

The UNITED KINGDOM TEA COMPANY'S TEAS are of WORLD-WIDE REPUTATION, and are supplied FIRST-HAND direct from the Mincing Lane Market.

Offices—
21 MINCING LANE,
LONDON, E.C.



REGISTERED TRADE MARK.

Duty-Paid Stores—
IMPERIAL WAREHOUSE,
LEMAN STREET,
LONDON DOCKS.



PASCALL'S GOLDEN MALTEX

PATENTED.

CONTAINS 25 PER CENT. OF

PATENTED.

ALLEN & HANBURYS' MALT EXTRACT.

"A delicious substitute for Cod Liver Oil."-Vide Dr. Tanner's Report.

In 1/- Bottles 9/- per doz. In 1-lb. Bottles 22/- per doz.

In 1-lb. Tins 21/- per doz. In 4-lb. Jars (Jars 6d., returnable) 1/6 per lb.

Of all Wholesale Houses, or of the Manufacturer,

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.

T. BAGE BLYTON & CO.

PHARMACEUTICAL C

CHEMISTS)

MANUFACTURERS OF

MEDICATED LOZENGES,

BOILED SWEETS, JUJUBES, AND COMPRESSED PELLETS FOR SALE BY CHEMISTS, AND EVERY DESCRIPTION OF CHEMISTS' CONFECTIONERY.

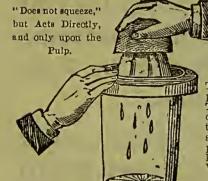
PRIVATE AND PROPRIETARY FORMULA CAREFULLY COMPOUNDED.

Prices and Price List on application with Business Card.

76 GORDON STREET, LOWER BROUGHTON, MANCHESTER.

London Agent-Mr. ARTHUR W. SHIRLEY, 30 Paternoster Square, E.C.

THE WORLD'S BEST LEMON SQUEEZER AT 1/-



This Lemon Squeezer is to the old-fashioned article what the Railway Carriage is to the Stage Coach.

THE "MODERN" LEMON SQUEEZER.

To use it, set the squeezer upon a tumbler, as shown by the accompanying illustration, place a half lemon upon the points, press downward, and rotate the lemon slightly. The ribs easily enter the pulp, the juice as it is liberated passes down through the openings into the tumbler; these openings are too small to allow the seeds to pass through. By this process the clear juice from the PULP is obtained free from admixture with the biter oil of the skin. The juice thus propured is doubtless a most wholesome beverage, and is certainly very agreeable to the palate. Once tried this squeezer will supplant all old-fashioned appliances. Being made of glass, it is as easily kept clean as a tumbler. This squeezer can be used by a child, without soiling the hands, it is so easily managed. With this new appliance none of the juice is lost, therefore its superiority to old types of squeezers will be obvious.

WHOLESALE PRICE ON APPLICATION TO

B. & E. M'HUGH & CO., BELFAST, IRELAND.

Patents taken out for India, Canada, Victoria, Australia, Queensland, New Zealand. Cape Good Hope; also Austria, Belgium, France, Germany, Italy, Norway, & Spain.

MILK PREP IN POWDER

PREPARED BY THE SWISS MILK CO., ST. GALL, SWITZERLAND.

UNSWEETENED OR SWEETENED.

The cheapest, purest, and most nutritious of all similar productions.

The Lancet says:—A very interesting and valuable preparation.

British Medical says:—The preparation represents the highest possible degree of concentration which can be obtained, and is sure to be appreciated.

The Medical Press says:—A milk which is with difficulty distinguished from fresh cow's milk.

London Office, 61 Mark Lane, E.C.

MINCING LANE, LONDON PEARSE & WHEAT

TEA, COFFEE, ETC.

SUPPLY AT LOWEST

In original Boxes, Half Chests, or Chests, as imported.

Duty Paid or under Bond.

Prices and Samples on application.



Or in Leaden or Foil Packets (\frac{1}{2}\-lb., \frac{1}{2}\-lb., \&c.),

Or in kilos., $\frac{1}{2}$ kilos., or fractional parts, for countries using these weights.

Fancy Tin Boxes any size or weight.

SPECIAL

BLENDS

TEA OF

2/

2/3

2/6

(Duty-paid prices quoted).

No. 2, No. 2a, No. 3, No. 3a, No. 4, $\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ No. 4a, No. 5, No. 5a, No. 6, No. A, No. T. No. 1, 1/6 1/4 $1/7\frac{1}{2}$ 10d. 11d. 1/ 1/9 1/101 2/

In Boxes, 20 lbs. or 40 lbs.; \frac{1}{2}-Ohests, 60 lbs.; or Chests, 100 lbs. 60 lbs. carriage paid to any Station in England or Wales. Terms-Net Cash with order.

CEYLON TEAS (PURE)-IN LEAD PACKAGES (2-lb., ½-lb., or 1-lb.)

Most attractively labelled.

Culloden Grange Orwell | Mooloya | Pen-y-lan | St. Ley's Sheen 1/6 1/10 1/8

Duty-paid Prices.

(For Export under Bond, 6d. per lb. less.)

Export Department.—Teas or Coffees in Bond. Shipped to any part of the world. Terms, f.o.b. Londou; against banker's credit or remittance. Samples, Price Current, and every information on application.

RAW COFFEES (Duty 14s. cwt.). Rio, Santos, Costa Rica, Mocha, East India, Mysore, Naidoobatum, Jamaica, Porto Rico, Ceylon, Guatemala, Manila, Java, &c.



ROASTED COFFEES (Duty Paid).

1/2, 1/3, 1/4, 1/5; Mocha, 1/6.

In Bags, 28 lbs., 56 lbs., or 112 lbs. net. Bags free. Also supplied Ground in 7-lb., 14-lb.

28-lb., or 56-lb. tins.

THE NEW FRENCH COFFEE—CAFE FRANCAIS to sell at 10d., 1/, 1/4, and 1/6, in 1/1. 1b., 1/1b., and 1-1b Canisters, Most tastefully labelled, without any firm's name appearing.

MEAT. PEPTONE. COCOA.

This Preparation of Cocoa and Peptonised Meat Extract forms one of the most powerful concentrated foods known; it is indispensable to invalids, a boon to the healthy, and to those of a weak digestion. From its richness in nitrogenous principles (21 per cent.), it contains all the elements of tissue muscle, and blood formation, in a form ready to be assimilated at once, being predigested. In Powder for Breakfast, &c., or in Tablets.

As taken by the late EMPEROR FREDERICK on the recommendation of Dr. Leyden. EASILY DIGESTED. PERFECT FLAVOUR. NO OBJECTIONABLE TASTE.

Price 1s. 6d. per Tin. "The article is in every way of satisfactory quality."—British Medical Journal. Price 1s. 6d. per Tin.

Sole Agents-SCHEIBLER BROS. & CO., 23 New Broad St., E.C.

ROWNTREE

The "MEDICAL PRESS AND CIRCULAR":—
"Certainly this preparation is of a delicate flavour . . . It is
perfectly soluble . . . the small quantity required for the
immediate production of a cup of excellent cocca will ensure for this
'Elect Extract' a favourable reception at the hands of persons of
week direction and all who prefer this

weak digestion, and all who prefer this wholesome beverage to tea and coffee.

The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus preprepared is one of the most digestible articles of food."

YORK, ENGLAND.

"RAMORNIE."

Extract of Meat.

the supplied to Office. 1-lb. Jars.....per lb.per dex. 10/6
5/9
8/0 and 11 Fenchurch Avenue, E.O. 8 lbs. Carriage Free.

21

vez! Uyez!! Uyez!!

AN ELEGANT BISCUIT CHINA FIGURE (as illustrated below), beautifully executed, an ornament to any shop, GIVEN AWAY to purchasers of

SHIRLEY'S A1 MENTHOL.

This figure will be admitted to be a charming novelty, bound to assist and increase the sale of this now popular brand of Menthol. Special Parcels (as below) have been arranged, so as to suit all classes of trade; it will also be seen that a large order is not necessary to obtain a figure, one being given with a 25s. Parcel, or two with a 40s. Parcel. A packet of advertising cards, new and attractive, is also sent with each order, so that every effort is made to assist the retailer in obtaining a quick and ready sale.

PARC	DEL	1.	25/-		,
4	dozen	2d.	realising	8	<i>d</i> . 0
1	,,	3d.	11	3	0
2	,,	$3\frac{1}{2}d$. ,,	7	0
3	,,	4d.		12	0
2	"	6 <i>d</i> .	"	12	0
			4	12	0

Thus making a profit of 17/- on an outlay of 25/-=68 per cent.

PARCEL 2. 25/-4 dozen 6d. realising 24 0 ,, 4d. ,, **1**s.

Thus making a profit of 19/- on an outlay of 25/- = 76 per cent.

PAR	CEL	5.	40/-			
Л	dogon	01	realising	<i>s</i> . 8	d. 0	
2	dozen	3d.		6	0	
3	"	$3\frac{1}{2}d$, ,,	10	6	
5	11	4d.		20	0	
4	33	6d.	11	24	0	
4	"	ou.	"		_	
				68	6	

Thus making a profit of 28/6 on an outlay of 40/-=70 per cent.

PARCEL 8. 40/-			
4 dozen 1/- realising	<i>s</i> . 48	0	
$\frac{1}{2}$,, $1/6$,,	9	0	
2 ,, 9d. ,,	18	0	
	75	0	
Thus making a profit of	35/-	on	an

outlay of 40/- = 87 per cent.



CAUTION.

As other "Aids to Sell," that have been introduced from time to time for Shirley's Menthol, have been studiously copied by houses who appear to lack orginality, it is expected that this figure will share the same fate, therefore the Trade are asked kindly to state distinctly

SHIRLEY'S A1 BRAND

when ordering, so as to avoid mistakes.

A1 COCAINE AND MENTHOL TOOTHACHE TUBE,

12 on a Card. 3/6 dozen.

This sells well wherever introduced; if you | Thus making a profit of 33/- on an have not had a dozen you cannot make a mistake in ordering a card.

PARCEL 3. 25/-

3	dozen	6 <i>d</i> .	realising	18	0
1	11	4 <i>d</i> .	"	4	0
2	"	18.	"	24	0
				46	0

Thus making a profit of 21/- on an outlay of 25/- = 84 per cent.

PARCEL 4. 25/-

		9 <i>d</i> . r	ealising	<i>s.</i> 9	<i>d</i> .
$2\frac{1}{2}$	11	1 s.	11	30	0
$\frac{1}{2}$	33	1/6	"	9	0
				48	0

Thus making a profit of 23/- on an outlay of 25/- = 92 per cent.

PARCEL 6. 40/-

5 dozen 3 " 2½ ",	6d. re 4d. 1s.	ealising		0
			72	0

Thus making a profit of 32/- on an outlay of 40/- = 80 per cent.

PARCEL 7. 40/-

AITOLL		10/-	s.	đ.	
4 dozen	6d	realising	24	Ö	
4 ,,	42.	"	16	0	
1 ,,	9 <i>d</i> .	99	9	0	
2 "	1 s.	"	24	0	
			70		
			73		

outlay of 40/- = 82 per cent.

The Chemist and Druggist says:—"Mr. Arthur W. Shirley, of 30 Paternoster Square, has produced a very attractive biscuit-china figure, represented in the annexed engraving. The advertisement is effective without being at all vulgar, and the little crier, we expect will see the state of the little crier, we expect will see the state of the little crief. the little crier, we expect, will soon be a familiar figure throughout the country. It will be seen from his advertisement that Mr. Shirley offers to give one of these to any purchaser of 25s. worth of his A1 menthol cones."

ARTHUR W. SHIRLEY, 30 PATERNOSTER SQUARE, LONDON, E.C.

Telephone Number, 1852.

Telegraphic Address-CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of page
A 1 RRAND MENTHOL CONES 22
A 1 BRAND MENTHOL CONES
Chloride of Ammonia Inhaler 46 ANDREAE, OSCAR, & CO
ANDERSON & ADAMS Chloride of Ammonia Inhaler 46 ANDREAE, OSCAR, & CO
AUSTRALIAN MEAT CO. "Plamornie" Extract of Meat 21
BALL, HOBSON & COForeign 34
Patent Medicines and Proprietary Articles 28 RARNETT & FOSTER Suphons 14
BARRETT, R. H. Bott'es 48
BLYTON, T. BAGE, & CO
BOORD & SON Pure Spirits of Wine 56 BOWDLEAR, W. H. & CO. Beeswax 13
ROWLING & GOVIER Shop Filters 49
BRACHER & CO Distilling Apparatus 48
BRADY & MARTINLiquor Cerii 40
BARCLAY & SONS Patent Medicines and Proprietary Articles BARNETT & FOSTER
BREKKE & HOWLID
BRODIE, J
BRATBY & HINCHLIFFE Aërated Water Machinery 11 BREKKE & HOWLID
BURROUGHS, J
Strophantnus Loototos 30
BUTLER, McCULLOCH & CO
CADRIEV BROS Coros COVER
BYGRAVE, J. & W
CITY SCHOOL OF CHEMISTRY AND
PHARMACY (LIM.) 6 CLARIDGE & CO. Pure Preparations of Pensine 36
COCKING & CO
COLEMAN & CO Meat and Malt Wine 14
FUME AND TOILET SOAP 27
COLTHURST & HARDING Oils, Paints, and Varnishes 56 CORSAN, J. R. Shop Fittin.s 49 COOPER & CO. Plasters 47 CROUCH, F. B. Damiana Wafers 35
CORSAN, J. RShop Fittines 49
COOPER & CO
DARTON, F., & CO.
DARTON, F., & CO. DE ST. DALIMAS, A
DURRANT, G., & CO
ELLIMAN, SONS & CO Embrocation TEXT 541
EDWARDS & SONS
CORPORATION (LIM.) General Accident Business 6 ESCHMANN BROS. & WALSH Soft Silk Flexible Catheters 51 EVANS, SONS & CO
EVANS, SONS & CO
EVANS, LESCHER & WEBB, London41, COVER
Wholesale Druggists 35
FERRIS & CO
FERRIS & CO
FLETCHER, FLETCHER & STEVENSON To Exporters and Indentors 5
Concentrated Liquors TEXT 544

Foot of page	Foot of page
THOL CONES	FORD, SHAPLAND & CO
DAME	
Chloride of Ammonia Inhaler 46 AR, & CO	GERAUT, E., & COSyphons and Selizogenes 12 GIBSON, R., & SONSConfectionery 40 GODFREY & COOKE
AR & CO Chemicals 42	GIBSON, R., & SONS
THE CO.	GODFREY & COOKE
rient Water 12 TRXT 541 . COVER	GOODALL, BACKHOUSE & CO.
RUG CO	GOODALL, BACKHOUSE & CO.
EAT CO.	Howshold Specialities 15
" Ramornie" Extract of Meat 21	GREEN, S Singleton's Golden Eye Ointment 47
& COForeign 34	GREENSILL, T. S., & SON Mona Bouquet 27
IS	GREGORY, WPine's Devonshire Oils 55
ines and Proprietary Articles 28	HAMILTON & CO
STER Syphons 14	HARGREAVES, DR. M.D. 7
Bott'es 48	HARRIS, A. J. Medical Labeller and Writer 49
E. & COConfectioncry 30	HASSALL & CO.
Pure Spirits of Wine 56	Liebig's Extract of Meat and Malt Wine 15
H. & COBeeswax 13	HAY, WSoluble Essences 10
VIERShop Fitters 49	HAYWOOD, J. HSurgical Appliances 51
Distilling Apparatus 48	HEARN. E. A., & CO Poison Bottle 46
STER Syphons 14 E. & CO. Confectionery 30 F. & CO. Confectionery 30 F. & CO. Beeswax 13 VIER Shop Fitters 49 Liquor Cerit 40 & SON Epsom Salts 57 CHILIFFE Agranded Water Machinery 11	HESELTINE, W., & SON Tea 18
& SONEpsom Salts 57	HOLLOWAY, PPills and Oin ment 49
A Number Western Marchineses 11	HOLKOYD, J., & CO. (LIM.) Machinery 48
	HAY, W. Soluble Essences 15 HAYWOOD, J. H. Surgical Appliances 51 HEARN, E. A., & CO. Poison Bottle 46 HESELTINE, W., & SON Tea 18 HOLLOWAY, P. Pills and Oin'ment 49 HOLROYD, J., & CO. (LIM.) Machinery 48 HOOPER, W., & CO.
VLIDCod-liver Oil 36 Hair Dye 50	HORN & SON Patents and Trade Marks 57
D & CO. (LIM.)	HOWLETT 8 Shop Fettings 40
Bicarbonate of Soda Chemicals 37	HORN & SON Carnabyn and Seltzer Water COVER HOWLETT, S. Shop Fittings 49 HUNGARIAN APERIENT WATER
	Diamond Mark 19
ELLCOME & CO.	HUNT. W. F., & CO. Bottle Caps 56 HUNTER, J. Vermin killer 55
Tabloids of Compressed Drugs 29	HUNTER, J Vermin killer 55
Strophanthus Tobloids 20	
LOCH & COHerbalists 44	
WShop Fitters 26	JAMES, DR. P
	JAMES, DR. P
RISON Disintegrator 48	JUHNSON, J. H. & S.
ELLCOME & CO. Tabloids of Compressed Drugs 29 Strophanthus Tobloids 20 LOCH & CO. Herbalists 44 W. Skop Fitters 26 Cocca. Coven RISON Disintegrator 48 OL OF CHEMISTRY AND	JOHNSON, J. H. & S. East India Oil of Muttard Seed 17
OF CHEMISTRY AND	WENDUITODAY DROGGED & GO
IM.)6	Wholesale Druggists 33
Pure Preparations of Pepsine 36 Oil of Peppermint 33Meat and Malt Wine 14	KERNICK & SON
Oil of Peppermint 33	KILNER BROS. Bottles 53
	KILNER BROS. Bottles 53 KIMPTON, H. Books: ller 7
SHMERE BOUQUET PER- ILET SOAP	LANG, JULES, & COBottles, Syphons, &c. 46
ARDING	LENNON, B. G., & COForeign Chemisus 33
Oils, Paints, and Varnishes 56	LEVERMORE, A., & CO Precipitated Chalk 57
Shop Fittin: 8 49	LEVY, JULIUSForeign Chemist 31
Oils, Paints, and Varnishes 56 Shop Fittin: 8 49 Plasters 47	LIEBIG'S WINE COBeef Wine 12
Damiana Wofers 35	LINCOLN DRUG COClarke's Blood Mixture 40
30.	LOFTHOUSE & SALTMER
ectacles, Clinical Thermometer 7	LONGMANS GREEN & CO
, APlasters 51	Watts' Dictionary of Chemistry 7
6	KERNICK & SON. Wholesale Druggists 33 KERNICK & SON. Wholesale Druggists 57 KILNER BROS. Bottles 53 KIMPTON, H. Books:ller 7 LANG, JULES, & CO. Bottles, Syphons, &c. 46 LENNON, B. G., & CO. Freign Chemists 31 LEVERMORE, A., & CO. Precipitated Chalk: 57 LEYY, JULIUS Foreign Chemists 31 LIEBIG'S WINE CO. Beef Wine 12 LINCOLN DRUG CO. Clarke's Blood Mixture 40 LOFTHOUSE & SALTMER Drugs 35 LONDON HOMEOPATHIC HOSPITAL 6 LONGMANS, GREEN & CO. Watts' Dictionary of Chemistry 7 LYNCH & CO. Catalogue, 1889. COVER
CO Pariumas 57	
NS	MACFARLAN, J. F., & CO. Wholesale Druggists 36
& CO Embrocation TEXT 541	MCHUGH, B. & ELemon Squeezer 20
LIABILITY ASSURANCE	MACK, H. Pasta Mack 27
ON (LIM.)	MARION & COPhotographic Apparatus 30
General Accident Business 6 OS. & WALSH Soft Sills Florible Carlotters 51	MARRIOT, E., & CO
JS. & WALSH	Medicinal Colatina Canenda As
Soft Silk Flexible Catheters 51	Corn and Bunion Plasters 50
Soft Silk Flexible Catheters 51 CO. Pulv. Lini c. Oleo Sem. Lini Con'usce COVER	MAY & BAKER Phenacetin-Bayer Gover MAY, ROBERTS & COSeltzogenes 16 MILLAR, A., & COSeltzogenes 16 MILLAR, A., & COCascara Sagrada. TEXT. 544 MUMFORD, G. SPure Crushed Linseed TEXT 544 MURRAY. SIR JAMES, & SON Fluid Magnesia 45 MUTER DR
R & WERR London 41 COVER	MAY, ROBERTS & CO. Seltzogenes 16
CR & WEBB. London41, COYER NS (LIMITED)	MILLAR, A., & COBritish Wines 13
TANE & CO	MOSS. J., & CO Cascara Sagrada TRXT 544
WADE & CO.	MUMFORD, G. S Pure Crushed Linseed Taxt 544
Wholesale Druggists 35 Nepenthe 31	MURRAY, SIR JAMES, & SON Fluid Magnesia 45
Gum Arabic 57	20 2 2 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NGHAM Leeches 49	NATALI, E. Shop Fitter 17
STCHER & STEVENSON	NATALI, E
To Exporters and Indentors 5	NEWSOME COLint 57
To Exporters and Indentors 5 Concentrated LiquorsTEXT 544	NOAKES, B., & CO Tin Canisters TEXT 541

1		
1	OLDFIELD, PATTISON & CO. Foot of page	30
ı	Rutter Colouring, Extract of Herbs Forence of	
I	Rennet	3
1	PASCALL, JGolden Maltex	20
ı	Tobaccos, Cigars, and Cigarettes	17
I	PEAKE. ALLEN & CO Foreign	34
ı	PHILLIPS, G., & CO. Spirits of Wine	21
ı	POTTER & CLARKIT Fluid Extracts	44
ı	PASCALL, J	20
l	PRITCHETT, W. E Dictionary of Synonyms	6
ł	PRONK, DAVIS & CO Drysaitery	54
1	QUALTROUGH, A. R Foreign Agent	30
1	PAINTS & COEmp. Cerat. Salonis	57
l	RANDALL & SON	57 16
ı	RAPHAEL, & COSpectacles	6
1	RICHARDS J. W. Concentrated Water	42 13
	QUALTROUGH, A. R. Foreign Agent QUILLIAM, J., & CO. Emp. Cerat. Sasonis RAIMES & CO. Composition Essence RANDALL & SON Lovenges RAPHAEL, & CO. Spectacles RENNER, DR. Vaccine Lymph RICHARDS, J. M. Concentrated Waters ROBINSON, B. Liebiy's Beef Wine ROBINSON & SONS Liebiy's Beef Wine ROCKE, TOMPSITT & CO. Wholesale Druggists ROCKLEDGE, J.	4
1	ROBINSON, BLiebig's Beef Wine	13
1	ROCKE, TOMPSITT & CO. Wholesale Druggists	51 35
ı	ROOKLEDGE, J.	
l	BOUSE & CO Glycerine and Cu umber TEXT	54
I	ROWNTREE & CO Elect " Cocoa	31
ł	SAINSBURY, S Lavender Water	57
1	SANFORD & SON	26 57
II.	SANGER & SONS Druggists' Sundries	23
И	SANITARY PAPER CO	8 511
Y	SCHEIBLER BROS. & CO 'Kaiser's' Cocoa	21
ı	SEABURY & JOHNSON	50
1	SHIPKOFF & COOlto of Rose	27
ı	SHIRLEY, A. W Menthol Cones	23
ł	SMITH, T. J	10
ł	SOUL, W. H., & COForeign Agency	31
l	STEDMAN, J Teething Powders	47
ı	STEINER, E., & CO. Vermin Killer	55
ł	STERN, G. & G. Pumiling TEXT	56 544
ı	SUMNER, R., & CO New Bandage Rolling	012
1	Machine and Victoria Indiarubber Syringe Cov	ER.
ı	SWISS MILK CO. Milk in Powder	20
1	TAYLOR. T. & F. JAërated Waters	16
1	Earthenware Inhaler, Pill Coating Machine	58-
I	ROBINSON & SONS Lint ROCKE, TOMPSITT & CO. Wholesale Druggists ROOKLEDGE, J. Wilen's Chemical Essence for Horses ROUSE & CO. Glycerine and Cu umber. TEXT ROWNTREE & CO. "Elect" Cocca SAINSBURY, S. Lavender Water SANDERS, H. G. & SON Collapsib. Tubes SANFORD & SON Permin-killer SANFORD & SON Druggists' Sundress SANFORD & SON Druggists' Sundress SANTARY PAPER CO. Disinfectant TEXT SCHEIBLER BROS. & CO. "Kaiser's" Cocca SEABURY & JOHNSON Plasters SCHULBLER BROS. & CO. "Kaiser's" Cocca SEABURY & JOHNSON Plasters SHIPKOFF & CO. Olto of Rose SHIRLEY, A. W. Menthal Cones SILICATED CARBON FILTER CO. Fitters SMITH, T. J. Cod-liver Oils SOUL, W. H., & CO. Foreign Agency SPIRONE, THE, CO. Dr. Churchill's Inhalant STEDMAN, J. Teething Powders STEPHEN SMITH & CO. Vermin Killer STEPHEN SMITH & CO. New Bandage Rolling Machine and Victoria Indiarubber Syringe COV SWIFT SPECIFIC CO., THE Blood Purifier SWISS MILK CO. Milk in Powder TAYLOR, T. & F. J. Aërated Waters TOGGOOD, W. Earthenware Inhaler, Pill Coating Machine	6
1	Earthenware Inhaler, Pill Coating Machine TOWNSEND, J	36 26
1	TYRER, PSauces and Ketchup	17
1	TYRER, P	19
1	VAUCINE ASSOCIATION, Pure Vaccine Lymph	42 31
1	VOGT, G	54
1	WALKER, TROKE & CO	55 52
1	WILKINSON, A., & SONCompressed Hops	44
	WILSON, S Patent Sticky Fly Papers	54
1	Ess. Bououet TEXT	
1	WRIGHT, W., & CO. Lethe	47
1	Liquor Carbonia Detergens	30
-	WRIGHT, W., & CO. Lette WRIGHT, W. V., & CO. Liquor Carbonis Detergens WYLEYS & CO. Compressed Pellets ZIMMERMAN, A. & M. Sulphate of Quinine	43
1	ZIMMERMAN, A. & M Sulprate of Quin'ne	31

LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names de not appear above are published in one of the other issues of this month.

AERTD & MINRLS ACETIC ACID

Apollinarls (Hungarian
Aperient Water, Diamond
Mark, Friedrichshall
Apollinaris)
Barnett and Foster
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Ellis (Enthin)
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Phospho)

Hassall and Co. (Citric Acid Phospho)
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Idris and Co.
Ingram and Royle
Jewsbury and Brown
Kinmond and Co.
Mills and Co. (Bourne)
Schacht, W., & Co. (Kronen-quelle)
Taylor, T. and F. J.
[See GINGER ALE.]

DITTO PLANT

[See Syphons and Essayons 1

[See SYPHONS and ESSENCES.]
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Bratby and Hinchliffe
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Producer, &c.)
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Bracher and Co. (Automatic distilling)
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Moss and Co.
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Stern, G. and C. (Pumillne)
Smith T. and H., and Co.
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Zlmmermann, A. and M.

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Hockin, Wilson and Co.
Maw Son & Thompson, S.
Sanger and Sons
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Wood, V.

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CHLRIDE OF GOLD Rowland, L.

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CHLOROFORM, &c.

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Howards and Sons

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North Medicine Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney

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Leo and Co.
Martindale, W.
Wyleys and Co.
CONFECTIONERY

Blyton, T. Bage, and Co. Gibson, L., and Sons Kerfoot, T. Pascall, J. Warrick Brothers

21

CONCENTRATED

LIQUORS

Evans, Sons and Co. Fletcher, Fletcher & Steven-

CORN CURES

Mason, W. B.
Maw, Son and Thompson, S.
Robiuson, B.
Seabury & Johnson (Plasters)
Thompson, M. F.
Young, H.

COTTON WOOL

Haynes, G., & Co. (Absorbeut) Robinson and Sons (Absrbnt.) Sanger, J., and Sons Scabury and Johnson

CRSHD LINSEED

Mumford, G. S.

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DOG MEDICINES Spratts (Patent)

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DRUGGISTS' SUM.

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Hockin, Wilson and Co
Idris and Co.
Kay Bros., Lim.
Lynch and Co.
Marriot, E., and Co.
Maw, Son and Thompson, S.
May, Hoberts and Co.
Sanger and Sons
Schutze and Co.
Toogood, W.
Warren. A. and J.
Wood, Vincent
DRUMS, CANS, &c.
Noakes and Co.
DYES

Ayrton and Saunders

Ayrton and Saunders Pronk, Davis and Jo.

EAU DE COLOGNE

Farina, J. M. Shirley, A. W.

ELECTRIC APPAR.

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Darton, F., and Co.
Gent and Co.
Orme and Co.

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Ellman, Sons and Co.

Bailey, W. H., and Son Ingram and Son Maw, Son and Thompson, S, Sanger and Son Schutze, F., and Co. ENGRAVERS

Barker, W., and Son Corsan, J. R. (Glass) Harris, A. J. (Glass)

ESSENTIAL OILS

Boehm, F. Bush, W. J. and Co (Lemons, Bush, W. J. and Co (Lemons, &c.)
Cocking (Japan Peppermint)
Cummock, J.
Duckworth and Co.
Evans, Sons and Co.
May and Baker
Stallman and Fulton
Stevenson and Howell
Symes and Co.
Treatt, B. C.
Warrick Brothers
Wright, Layman and Umney

ETHER Duncan, Flockhart and Co. (Chloric)
Howards and Son
May and Baker
Bobbins
White, A., and Sons
Woolley, Sons and Co.
Wright, Layman and Umney
ESSENCES, FRUIT

AND SOLUBLE

Bratby and Hinchliffe
Burgoyne, Burbidges and Co.
Bush, W. J., and Co.
Carter and Wright
Cummock, J.
Duckworth and Co.
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ESTABLISHED A.D. 1746.

CONTENTS.

PAGE	PAGE
Introductory iii	Stamp Duty on Medicines continued-
Additions and Alterations to February 18 Coloured inset after 32	Lozenges (unless recommended as Medicines) exempt 289
Addresses (Registered) for Telegrams Blue Paper 328	Medicinal Drugs not identical with Chemical Com-
Aneroid Barometers—Prices of	positions 283
"Catalogue of Medicines" of the past Century 295	Mcdicinal Drugs not "entire" liable to Stamp Duty 288
Dr. James's Fever Powder, Notes on xii-xv	Pills—Diverse kinds (stamped and unstamped) may
Dosimetric Granules 266	be sold at same time by same Dealer 290
Index to Advertisements vii-xi	" May be sold unstamped from a "Proprietary"
Sec. I.—Proprietary Medicines, Mineral Waters, Perfumcry,	Vase, if "twisted up" in plain paper 292
&c 17—226	" Six anti-stamp Labels for 263
Sugar-coated Pills, &c., by W. R. Warner & Co 233-270	vases of, with anti-stamp Coloured Labels 264
"II.—Imported Proprietary Medicines, Perfumery, &c. 315—324	Sohedule of Medicine Act—Comments on 289—294
" III.—A Selection of Druggists' Sundries, &c 323-430	"Specific" and "Nostrum," Definitions of 293
"Medicine Act" Advertisement, published A.D. 1787 297 Mineral Waters, Characteristics of 155	Toothache Fluid, though scheduled in Medicine Act,
1 Parvilles	may be analogo to the control of the
Stamp Duty on Medicines: -	Vases, effect of Labels on, as to Liability to Stamp Duty of Contents
Act of Parliament 52 Geo. III. c. 150 (Medicine Act) 273	702 150
3 & 4 Gul. IV. c. 97 (Exemption of	Vines-Medicated-
Mineral Waters, &c) 225	Brands for Sale of which a License is required 298
38 Vic. c. 23 (Excise License im-	000
1 Noted on Madicine Vandors 779	Coat of Retail Dealer's License
Uapsules of Copaiba only	Foreign Vinous Mcdicines imported specially 298
Catalogue-heading may render Stamp Heggssary	Wines which can be regarded as Beverages, saleable
even it habet of article (in not	by Licensed Dealers only, even if prescribed 291
Digestive Ginger Candy	Tclegram Code Blue Paper 326-321
Fluid Magnesia not liable to Stamp Duty 286	Trade Notes, Carriage of Goods, Hours of Business, &c xvi

NEWBERY'S CATALOGUE will be mailed free, on request, to Members of the Trade in any part of the world. 25

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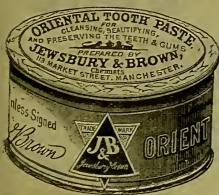
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Our efforts to introduce our improvements have been strengously opposed by those who simply copied (perhaps through lack of originality and barrenness

of ideas) the antiquated concoctions of their more honourable and enterprising ancestors, who had, however, in reality made but slight advance over the dark ages of pharmacy when lizards' skins and frogs' eyes were regarded as indispensable remedies. These antiquated forms, which had answered for their ancestors, they said were good enough for the present generation, and they resisted with all their might our innovations and improvements. But at last they realise that they are out of harmony with the spirit of the times, and find the resistance futile and our success an accomplished fact.

In their confusion they are content to figure as our imitators, and attempt to suck How they do. our blood by slavishly copying our labels, our packages, the wording of our circulars,

and our advertisements.

It is well known to the profession that the prime secret of our success has been quality and accuracy; our imitators in their haste for lucre The Secret of forget this feature, and rely upon misleading our supporters by substituting inferior products and clumsily copying appearance. These imitators also overlook the fact that the world is getting wise, and distrusts those who pirate their neighbours' goods and prefers the genuine and pure.

By the enormous increase of our manufactures we have been enabled to reduce our prices Pure drugs at moderate from time to time, and shall always prices. keep our prices at a moderate advance

over the cost of pure drugs and skilled labour.

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We were the first to introduce Saccharin into this Original Pure Saccharin in compressed form. We were also Tabloids. the first to adopt it for masking the taste of offensive drugs in the compressed form, and, after careful study, we adopted it in such cases as we found desirable. We have been clumsily imitated in these saccharin products, as

in other of our improvements.

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Aconite Tinct. 1 min.
Aloin, 1/10 gr.
Anti-ConStrych. 1/80 gr.
Stipation | Strych. 1/80 gr.
Ammon. Bromide, 5 and 10 gr.
Ammon. Chloride, 3, 5 and 10 gr.
Ammon. Chloride, 3, 5 and 10 gr.
Ammon. Chloride with Borax.
Antifebrin, 2 gr.
Antipyrin, 5 gr.
Apomorphine Mur., 1/50 gr.
Arsenious Acid, 1/100 and 1/50 gr.
Arsenious Acid, 1/100 and 1/50 gr.
Arsenious Acid, 1/100 gr.
Belladonna Tinct., 1 mm.
Bismuth Sub-nit., 5 and 10 gr.
Caffein Citrate, 1 gr.
Calcium Sulphide, 1/10 gr.
Capsicum Tinct., 1 min.
Cascara Sagrada Ext., 2 gr.
Cascara Sagrada Ext., 2 gr.
Cacacara Sagrada Ext. (Dry) 1 gr.
Euonymin, 1/2 gr.
Nux Vomica Ext. 1/16 gr.
Catiartic Comp., U. S. P.
Charcoal. 5 gr.
Cinchonidia Salicylate, 2 gr.
Cocaine, Potash and Borax (Voice)
Digitalis Tinct., 1 min.
Digitalin, 1/100 gr.
Dover Powder, 1/4 gr.
Euonymin Resin, 1/8 gr.
Hydrarg. Iod. Rub., 1/20 gr.
Hydrarg. Iod. Nub., 1/20 gr.
Hydrarg. Subchlor. (Calomel), 1/10 gr.
Hydrarg. Subchlor. (Galomel), 1/10 gr.
Hydrarg. Subchlor. (Galomel), 1/20 gr.
Hydrarg. Subchlor. (G

Phenacetin, 5 gr.
Phlocarpin Mur., 1/20 gr.
Piperine, 1/20 gr.
Piperine, 1/20 gr.
Podophyllin Resin, 1/4 gr.
Potash Bicarb., 5 gr.
Potash Chlorate, 5 gr.
Potash Chlorate with Borax.
Potash Permanganate, 1 and 2 gr.
Potash Permanganate, 1 and 2 gr.
Potassium Bromide, 5 and 10 gr.
Potassium Iodide, 5 gr.
Quinine, 1/10, 1/2, 1, 2, 3 and 5 gr.
(Quinine Sulphate, 1 gr.
1 ron Hypophosphite, 2 gr.
Acid. Arsenios.
Strychnine Sulphate, 1 gr.
Quinine Sulphate 1 gr.
Acid. Arsenios. 1/20 gr.
Quinine Sulphate 1 gr.
Acid. Arsenios. 1/20 gr.
Strychnine Sulphate, 1/30 gr.
Rhubarb, 3 gr.
Rhubarb, 3 gr.
Rhubarb Gomp. (Pil.), 3 gr.
Rhubarb and Magnesia (Gregory Powder), 5 gr.
Saccharin, ½ gr.
Saccharin, ½ gr.
Soda Bicarbonate, 5 gr.
Soda Bicarbonate, 5 gr.
Soda Sulpho-carbolate, 5 gr.
Sodium Taurochoiate, 4 gr.
Strophanthus Tinet., 2 min.
Sulphonal, 5 gr.
Tannin.
Test Tabloids (Fehling's). Tannin.
Test Tabloids (Fehling's).
Tinct. Camph. Co. (Paregoric), 2 min.
Tinct. Camph. Co. (Paregoric), 2 min.
Iron Pyrophos, 2 gr.
Quinine Sulph. 1 gr.
Strychniue Sulph.,
1/100 gr.
Trinitrine (Nitroglycerine), 1/100 and 1/50.
Trinitrine and Amyi Nitrite.
Trinitrine Comp.

Nitrite of Amyl, 4gr.
Capsicum, 1/50 gr.
Menthol, 1/50 gr. Urethane, 5 gr.
Voico (Potash, Borax and Cocaine).
Zinc Sulphate, 1 gr.
Zinc Sulpho-carboiato, 2 gr.
Zymine Tabloids.
Zymine Comp. Tabloids.

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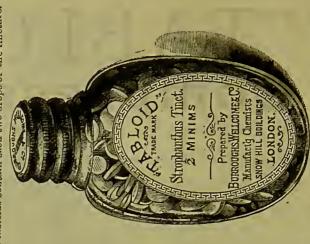
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50 London, Buildings, TABLOMS.—Strophantlus each), 100 in bottle, retail 2s. BURROUGHS HIII Snow I

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For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

Piterary Contents.

An Old London Drug shop 533 Australian Pharmacentical News 533 Bankruptcv Reports 541 Canadian Pharmaceutical News 533 Correspondence: Pharmacy Act (Ireland); Openings in Australia; Commercial Travelling .555 Patent Medicine Trade and Act; Oil of Anise; Northern Cutters 556 Euouymin; The "Oss" Question; Sale of Medicated Wines 557 Dispensing Notes 557 Legal Queries 557 Miscellaneous Inquiries 558 Cascara Sagrada 539 Editorial Notes French Pharm Gazette German Pharm Cazette German Pharm Gazette	An Old London Drug shop 533 Australian Pharmacentical News 533 Bankruptcv Reports 541 Canadian Pharmacentical News 533 Correspondence: Pharmacy Act (Ireland); Openings in Australia; Commercial Travelling 555 Fatent Medicine Trade and Act; Oil of Anise; Northern Cutters 556 Euonymin; The "Oss" Question; Sale of Medicated Wines 557 Dispensing Notes 557 Legal Queries 557 Miscellaneous Inquiries 558
	The Medicine Stamp Act— Trade Report Gehe & Co.'s

Editorial Notes—cont. PAGE
Psycho-Therapeutics 545
The Propagation of Economic
Plants 546
French Pharmacentical News 532
Gazette 543
German Pharmaceutical News 533
Leaderettes 547
Legal Reports 540
Metropolitan Reports 530
Notes of Novelties 542
Notes on Books 548
Oleum Pini Pumilionis 547
Personalities 535
Provincial Reports 530
The Disgruntled Greengrocer:
A Queer Story 536
Trade-marks Applied for 542
Trade Notes 537
Trade Report 550
Gehe & Co.'s Report 553
Schimmel & Co.'s Report 551

TO AMERICAN MANUFACTURERS. - Our representative, Mr. T. E. Parker, is now on a business visit to the United States and Canada during the next few months. Mr. Parker is now in New York and intends to visit during his tour Philadelphia, Boston, Chicago, Pittsburgh, Baltimore, St. Louis, Cincinnati, Detroit, Toronto, and Montreal. Letters for him may be addressed to Mr. Harry V. Dakers, office of THE CHEMIST AND DRUGGIST, 45 Liberty Street, New York.

WE have pleasure in announcing to Continental subscribers that henceforth, by arrangement with the post offices of the various countries, subscriptions to THE CHEMIST AND DRUGGIST can be paid at any post office in Austria-Hungary, Belgium, Denmark, Germany, Holland, Norway, Russia, and Sweden at our rates, namely 10s. per annum including postal delivery to subscribers in any of those countries. Subscriptions may date from the first issue of any month.

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Price 3s. 6d., or by post 3s. 10d. May be ordered along. with ordinary goods from the principal wholesale houses, who supply it at the published price, 3s. 6d. A list of the firms who hold stock was published in our issue of March 30.

This book may be obtained in Australia from the offices of The Chemist and Druggist of Australasia, Normanby Chambers, Melbourne, and 13 Queen's Chambers, Sydney, price 5s.

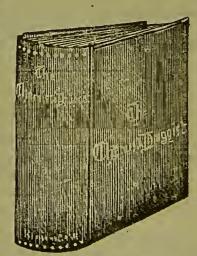
Our agent in New York, Mr. Harry V. Dakers, 45 Liberty Street, will supply "The Art of Dispensing" to American pharmacists at \$1.25 per copy, post free.

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"THE HANDY BOOK OF MEDICINE-STAMP DUTY."

THIS work has been written for us by Mr. E. N. Alpe, of the Solicitors' Department, Inland Revenue Office, Somerset House, who has had a wide experience in and intimate knowledge of the administration of the Acts which regulate the sale of proprietary medicines. The Handy Book is, consequently, of exceptional value to chemists and druggists, more especially in showing how medicines are made liable to stamp-duty by labelling, circulars, and the like. Reviewers have been unanimous in stating that the work is not only complete, but interesting and invaluable. It is as free as possible from legal phraseology, is readable, and is nicely got up. Price 2s. 6d., or by post 2s. 9d. May be obtained through the wholesale houses in the same way as "The Art of Dispensing."

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THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in The Chemist and Druggist of Australasia. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

ADVERTISEMENTS of situations vacant and wan'ed, businesses for disposal, &c., will be received by us up till the first post on Friday morning. \mathbf{d}

Metropolitan Reports.

CARBOLIC-ACID POISONING.—An inquest was held at the Marylebone Coroner's Court on Monday before Dr. Danford Thomas respecting the death of Harry Yeomans, a draper out of employment, who appeared to have taken carbolic acid at his lodgings in Wells Street on the previous Tuesday. He died at the Middlesex Hospital on the following Friday. Verdict—"Suicide while of unsound mind."

St. Jacobs Oil Warehouse on Fire.—A serious fire broke out at about a quarter past eleven on Saturday morning last in the top floor of the St. Jacobs Oil warehouse, belonging to Messrs. Charles Vogeler & Co., in Farringdon Road, London. No less than twelve engines were on the spot in a few minutes. With the aid of the railway hydrant the fire was speedily under control, only the top floor being burnt out.

LONDON MINERAL-WATER MANUFACTURERS' ASSOCIATION.—The members of the Mineral-water Bottle Exchange and Trade Protection Society held their annual dinner on April 11 at the London Tavern, Fenchurch Street, Mr. Thomas Bond (president) in the chair. There were representatives present from similar associations in Birmingham, Manchester, Leeds, Dover, and Folkestone. Mr. Walter Davenport (secretary), in replying to the toast of the evening, said that during the two and a half years that the Association had been in active operation they had received into the Bottle Exchange and sent out to respective owners over 9,000,000 bottles, besides some thousands of syphons and boxes. But the Association was not merely for bottle exchanging, it had the higher object of purifying the trade, which they were in a fair way of doing, thanks to judicial assistance. The Association had gone on a step further towards improving their status by becoming connected with the London Chamber of Commerce. (Hear, hear.) They had increased in membership during the year, and their finances were in a condition to enable them to pay back the levies of 1,200l. which they had made upon the trade for the purposes of carrying on the Association in its early stage. discussion followed as to the desirability of applying to Parliament for an amendment of the Merchandise Marks Act for the benefit of the Association, but it was generally conceded that a new "Bottle law" altogether would be better.

Probincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

MESSRS. AUSTIN & SONS, Excelsior Chemical Works, Nechells, have just completed an addition to their already extensive works, where they manufacture blue and other laundry preparations.

AN ELECTRICAL AND INDUSTRIAL EXHIBITION is to be held at Bingley Hall during August, September, and October of this year. Applications concerning this should be addressed to the manager, County Chambers, Corporation Street.

CHARGE AGAINST A MEDICAL ASSISTANT.—At the Birmingham Police Court on Monday, Andrew Anderson, medical assistant, Tower Street, was fined 10*l*. and costs for giving a false certificate of death in respect of Mary Ann Hilliard, whose death was the object of an inquiry before the Deputy Coroner a week ago. The defendant gave the certificate, which contained the signature of his employer, Mr. D. J. Macdonald, who had never himself seen the woman.

Poisoning Case.—The Coroner (Mr. Hawkes) held an inquiry on Monday into the circumstances attending the death of Henry William Atkins (54), of Lowe Street, who was employed as manager by Messrs. Whitfield, brass

founders, Oxford Street. Deceased had of late been an excessive drinker, and on Friday of last week he was noticed by a girl at his place of business staggering about. He shortly afterwards expired. It was afterwards ascertained that deceased had taken a dose of cyanide of potassium. It was thought that the man was intoxicated when he drank the poison, and the Coroner suggested that probably he took it thinking it would do him some good. A verdict of "Death by misadventure" was returned.

EXETER.

THE GUARDIANS have accepted the tender of Mr. T. E. Fouraker for the supply of drugs both for the workhouse and their city dispensary for the year ensuing.

TINCTURE OF CHLOROFORM AND MORPHIA AT THE WORKHOUSE.—Last week, at a meeting of the Board of Guardians, Mr. Gould called the attention of the board to the extensive use of a dangerous drug supplied to the workhouse, namely, tincture of chloroform and morphia. The amount supplied during the year ending March 30 last was no less than 29 lbs. The drug was used by medical men as a sedative, but outside the profession as a sedative and stimulant. He found on inquiry that 1 lb. would produce 700 doses, so that if his information was correct, they had 18,200 doses to account for during the half-year. He did not want to reflect on the character of their medical officer, because he believed Dr. Woodman was a man they could put the utmost confidence in, but they must know for what purpose it had been consumed. Three years ago there was something said about this drug, and they were then of opinion that it should not be within the reach of any but qualified persons. He moved that the attention of the medical officer be called to the largely increased supply of chloral-morphia to the workhouse, and that an explanation be asked for. In the course of a discussion one guardian said half the quantity used would be sufficient to poison everyone in Exeter. Mr. Bond thought that they should have the officers and the books before them and make a searching investigation. He moved an amendment to that effect. This was carried. The inquiry was held at the workhouse on Saturday, April 13. Dr. Woodman was present, and there was a large attendance of guardians. Mr. Gould, who stated the question, said he had ascertained that the quantity of the tincture supplied during the past year had been not 29 lbs. but 42 lbs. Only 15 lbs. were used in the previous year. Was not this a matter that called for inquiry? Dr. Woodman had held the office of medical officer to the workhouse for twenty years; and it would be difficult to find a gentleman who would discharge the duties with greater ability or attention, and he enjoyed, and deservedly so, the entire confidence of the whole body of guardians. (Applause.) If the latter gentleman could show that he had prescribed 42 lbs. of this powerful compound during the year there would be an end of the matter.

Dr. Woodman remarked that it was surprising more was

not used last year.

Mr. Gould stated the composition of the tincture, of which, he was told, the usual dose was 10 minims. One pound of this tincture would contain 700 doses; so that the 42 lbs. supplied to the workhouse for the year ending Lady-day last contained 29,400 doses. He should like Dr. Woodman to account for those doses.

After some remarks by other guardians, Dr. Woodman said it was true that the amount of this chloroform-morphia had been used by him at the workhouse during the past twelve months, and a little more. It was a new preparation, and he thought it exactly met the wants there. It was almost impossible to poison anybody with it, as it was a very mild preparation. Half an ounce contained only 1 grain of morphia, of which 2 grains was considered a poisonous dose for an adult. One ounce of this mixture, therefore, undiluted would be sufficient to poison a person. Considering, however, that about two pints of water would be necessary to make it at all palatable, it would be understood that that quantity could not easily be swallowed by misadventure. On that ground he had not used any other sedative in the "house" for some time past. The quantities of other sedative drugs taken into the "house" some time ago were now almost intact. He also showed that this was a comparatively cheap compound. It was 2s. 9d. per lb., much cheaper than liquor

opii, and not nearly so dangerous. The compound was sold by weight, and upon carefully measuring it he found that 1 lb. contained 13 oz. 2 drachms, which gave 600 doses to the pound, and not 700 as stated by Mr. Gould. On April 1 there were sixty-cight bottles at the workhouse to be made up. Out of that number thirty-nine were to contain this medicine, some more and others less. It took only thirty patients, taking 10-minim doses of the mixture three times in the twenty-four hours, to consume a pound a week of the medicine. Usually there were 130 to 140 cases on his books, besides which he had certainly an average of about twenty a month who came to him "in and out" for medicine—children and old people. Considering the number of old people sent there with chronic coughs and aches and pains of all sorts, it was not surprising that so much of this medicine was used, and he found there was no medicine which was so agreeable to the poor unfortunate persons, and which, in his opinion, did them so much good, and yet was so easy to dispense.

After some discussion it was resolved "that the guardians were satisfied with the medical officer's explanation, and that

the inquiry now be ended."

LIVERPOOL.

Wanted, a Representative Society.—At the trade meeting last week there was felt a decided want of a well-organised society to represent trade interests before the Board of Trade, Inland Revenue authorities, and Parliament. Two of the speakers expressed themselves to the effect that it was useless looking to the Pharmaceutical Council in such matters, and this seemed to express the general feeling of the meeting. When will that august body discover that there are matters worth attention other than new Council rooms, stained-glass windows, and decorative art generally? When will it discern that there is a small portion of Great Britain still outside Bloomsbury Square, and that there are a few (just a few) good men outside its own hallowed circle? When will it condescend to things mundane, and gain the confidence of the trade? Echo answers, When?

HOSPITAL FOR INFECTIOUS DISEASES.—There has been a long-felt want in Liverpool of additional accommodation for patients suffering from infectious diseases. When at any time there has been a tendency towards an epidemic, the authorities have been exercised in mind as to how they should cope with it. About three years ago it was decided to build an additional hospital for the purpose, but when any particular locality has been decided on, the inhabitants and owners of property in the neighbourhood have always entered a vigorous protest against it. Recently, when it became known that the Edge Lane Hall estate (the site of the late exhibition) had been selected as a suitable locality, a deputation, introduced by Sir James Poole, waited on the Mayor and presented a numerously-signed petition against it. It was argued that the petitioners were not actuated merely by selfish motives to save their own property, but they wished to prevent a mistake being made which would prove disastrous to the patients who might be taken to the hospital. It would be close to the railway and stand on a bed of clay. Dr. Cameron (who resides in the locality) said "he thought to place a fever patient there would be one of the most refined pieces of cruelty they could commit. A more preposterous proposal he had never heard." Possibly these objections have been got over, as measurements are being made, and the hospital is to be erected at a probable cost of 12,000%. to 14,000%.

MANCHESTER.

MR J. HARDEMAN, chemist and druggist, will shortly give up his shop at 55 Bury New Road. He is retiring from the retail trade, but proposes to continue the wholesale business, making a feature of his beetle-powders and other specialities.

Druggists as Guardians.—The results of the elections of poor-law guardians have now been announced, and the chemists and druggists who were amongst the candidates have been very successful. Mr. Charles G. Breadner, Elizabeth Street, Cheetham, who sought re-election as one of the representatives of the township of Cheetham on the Prestwich Board, received 1,031 votes, and was thus returned at the

head of the poll. Of the two gentlemen connected with the drug trade who stood for the Chorlton Board, one—Mr. Wm. Ramsden, 287 Wilmslow Road, Fallowfield—was defeated; but the other—Mr. George Wm. Pratt, 44 Stretford Road, Hulme—was placed at the head of the list with 2,309 votes. Mr. James Berry, Grosvenor House, Newtown, Flixton, was re-elected as one of the representatives of Clifton on the Barton Board. On the Manchester Board, Mr. Geo. Rooke, manufacturing chemist, who has been a member of the board for some twelve or thirteen years, was re-elected.

SWANSEA.

SEQUAR'S DEPARTURE.—Saturday last saw the departure of the Sequah medicine man, his carriage being booked by Great Western Railway to Newport, Mon. Sequah is said to have benefited during his month's stay here to the tune of nearly 5,000%.

TUNSTALL.

Serious Fire.—On Sunday morning a fire was discovered in the pharmacy belonging to Mr. Fisk, in High Street. The discovery was made by the assistant, Mr. Marsden, who was awakened by hearing the noise of bottles bursting. He at once raised the alarm, and the police and mcmbers of the fire brigade were soon on the spot. Mr. Marsden insisted on the doors being kept closed, and a copious supply of water was poured in through one of the windows. The fire was extinguished in about half an hour. The damage to the property is not great, but the stock in the shop has been almost totally spoiled. Fortunately the flames did not extend to the cellar, where several barrels of oil and inflammable liquid were stored. The fire is supposed to be due to the spontaneous combustion of some chemicals, there being no stove or fireplace near the spot. Mr. Fisk was in London at the time. The amount of damage is calculated to be at least 500%.

SCOTLAND.

DUNDEE.

A SWINDLER IN THE CAMP.—A local paper gives a long account of the recent history of Mr. Thomas Easson, a young man of two-and-twenty, who was last week sent to prison for a term for numerous acts of fraud. Easson is an old Morgan Hospital boy, and the son of an honest mechanic now deceased. When he left the hospital, a well-educated lad, he became a clerk, but this occupation did not satisfy him long, and he made various changes until about three years ago, when he seems to have entered on his career of fraud. then suddenly informed people who did not know him better that his father had left him a fortune; and on the strength of this statement he actually obtained a partnership in a good house, and latterly a factory, which he was proceeding to furnish. Tailors, saddlers, horse-dealers, and others were amongst the young man's dupes, and he actually succeeded in buying a small drug shop in the west end of the town, and under the name of Evans carried it of for a considerable time-report says three months-but it is inconceivable that a lad entirely ignorant of medicine and pharmacy could have carried on the shop with the assistance of a boy for such a period. He managed, however, to induce a local house to give him 51. worth of goods, and as it seemed likely that the money for them would not be forthcoming, one of the partners gave "Evans" a call, refusing to leave the shop until he got his money. After a free exchange of opinion the wholesale man squeezed somewhat over 41, out of the retailer, and pockcted sundries which were lying on the counter for the difference. Easson patronised pharmacy just a day too long, for it was while behind the counter that he made the acquaintance of a gentleman who was the means of finding out his true character.

EDINBURGH.

SEALING-WAX FACTORY ON FIRE.—Messrs. Stewart & Co.'s scaling-wax manufactory in Tennant Street, Leith, caught fire on Monday, and before being extinguished a workshop was entirely gutted. Four hundred pounds will cover the damage.

ALLEGED THEFT.—Thomas Henderson (21), druggist, and William Wallace (26), hairdresser, both residing in Leith, were remitted from the City Police Court to a higher court on Saturday on a charge of stealing four dozen jars of extract of meat, six dozen cakes of soap, fourteen dozen bottles of Indian oil, eleven dozen bottles of Prairie Flower, and other articles, from the shop of Messrs. T. & H. Smith & Co., wholesale druggists, Duke Street, Edinburgh, between January 1 and 12.

GLASGOW.

METHYLATED SPIRIT DRINKERS.—In spite of Excise prosecutions and surveillance the traffic in methylated spirit goes on as briskly as ever in some districts of Glasgow. The druggist is not so much the offender as the doctors in poorer neighbourhoods, who have recourse to any means not absolutely illegal to eke out a livelihood. The methylated spirit tippler is always recognisable by his fragrant breath, as much as by his abject, cringing manner, dilapidation of dress, and general forlornness. He is a gregarious being, who, when he has succeeded in getting a supply of his beloved tipple in a place, goes straightway and conveys the glad tidings to his companions in misery, and in a short time the happy druggist, if he is so minded, can ply a roaring trade. The difficulty with the Excise is to procure actual proof that the vendor sells methylated spirit knowing that it is for use as a beverage, and this affords the unscrupulous practical immunity.

THE SALE OF MEDICATED WINES.—Mr. W. S. Galbraith made application before the justices at Pollokshaws on Saturday, April 13, for a licence to sell wine on his chemist and druggist's premises, 52 Paisley Road, West. The wines he wished to sell were of a medicated nature, such as "Coleman's beef and malt wine," &c., and he had been instructed to make this application by one of the Excise. He stated that it was an unusual application, but that he was forced into it. In answer to a question, he stated that many chemists and druggists in England held the licence, but, so far as he knew, none in Scotland. The Court were of opinion that the licence should be granted; but the chief constable asked for delay until the following Tuesday, when it could come up before the Confirmation Court to beheld in Renfrew, and the clerk was instructed to make the necessary inquiries and place the information obtained before the Court. On Tuesday, when before the Renfrew Court, the clerk's report was favourable to the granting of the licence, but the justices by a majority found against the granting of same; the principal reasons being the Forbes McKenzie Act, which will not allow open shop on Sunday where a licence might be held; and the idea in the minds of their honours that it was a new departure, which would open the door for a host of new applications, thus increasing on their part and that of the chief constable extra responsibility.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE PARISIAN DOCTRESSES.—The worst fears of the male doctors have been realised. As the first duty of a diploma holder is to get any lucrative office he can, Mlles. Blanche Edwards and Victorine Benoit, the new graduates of the Paris faculty, have applied to the Municipal Council for medical appointments in some of the city female schools. The petitions have been favourably received, and referred to the proper authorities.

IN MEMORIAM.—At the Academy of Science's sitting of April 15, after disposing of the correspondence, President Des Cloizeaux alluded to the loss they had experienced in the person of their old associate, M. Chevreul. The family had expressed the wish that no speeches be delivered at the funeral. But they, another family of Chevreul as it were, could not let him pass away without some token of regret and affection—him who for sixty-three years sat among them. Briefly referring to the work of the illustrious academician, M. Des Cloizeaux remarked that from 1826 to 1889 M. Chevreul read before them no less than four hundred memoirs. Finally, a telegram of condolence was read from

H.M. the Emperor of Brazil, an associate member, and the Academy adjourned as a sign of mourning.

FRENCH PHARMACY AT THE EXPOSITION.—A number of pharmacists from all parts of France have united to make an exhibit illustrating French pharmacy, its work, discoveries, and progress. M. André Pontier, formerly a pharmacist here, but now retired from business, started the project more than a year since; some fifty adherents have joined, and a good place has been secured at the Exposition. They have 9 mètres of counter room, 1 mètre wide, whereon to set up their display. They propose to have in show-cases on the table specimens of all the chemicals discovered or isolated by pharmacists, and in glass closets above chemical and pharmaccutical apparatus presenting some interest owing either to their antiquity or historical association with scientific discoveries. Pharmaceutical literature will also be represented, and a pamphlet of about 200 pages is to be issued, giving short biographies of all noted French pharmacists to the present day. Professors Berthelot, Planchon, Riche, Jungfleisch, Moissan, and others are to contribute towards the success of the collective exhibit.

A NEW TEST FOR COPPER.—M. Denigès, of the Bordeaux faculty of medicine and pharmacy, has recommended the following process:—Place in a test tube 2 c.c. of a cold saturated solution of potassium bromide, and add 1 c.c. of concentrated sulphuric acid. At first the mixture will turn to a light yellow near the acid, but on shaking it will become colourless again, provided the bromide bc free from bromate. Now two or three drops of the liquor under examination are added, and if it contains even traces only of copper a carmine-red colouration will develop, becoming brighter on heating, and disappearing when water is added. The same reaction will take place even with copper salts in the solid state. A few precautions, however, are useful. For instance, the solution to be tested for copper should be previously acidulated with sulphuric acid, to separate insoluble sulphates, and avoid cloudiness during the coloured reaction. It is a good plan, also, to prepare beforehand the reagent by adding to a saturated solution of potassium bromide half its volume of sulphuric acid, free from nitrous compounds, and filtering afterwards through asbestos, to separate out the potassic sulphate. The presence of either nickel or cobalt will not affect the accuracy of the process.

HOW TO EXHAUST CINCHONA IN PHARMACY. - The question of exhausting cinchona, so far as the manufacturing chemist is concerned, is one no longer open to discussion. But, pharmaceutically, opinions differ, because the complete extraction of alkaloids is not all that is desired. M. Ed. Landrin has examined this side of the question in an instructive memoir recently presented to the Academy of Sciences, and come to conclusions somewhat at variance with those accepted generally. As a base for comparison he selected a certain quantity of Java cinchona succirubra, and carefully analysed it by the modern methods. The bark was found to contain, per mille, (a) 75.92 of total alkaloids, (b) 51.83 crystallisable salts, and (c) 21.27 quinine sulphate. Some of the same bark was then exhausted with boiling water, the treatment being continued to complete extraction of soluble constituents. They were, as compared with the above standard, the following: -(a) 64 42, (b) 43.49, (c) 15 85, which shows water to be far from a worthless menstruum. Alcohol of 90 degrees was next employed, and found to extract the following:—(a) 65.97, (b) 45.71, (c) 18.27. And finally water, acidulated with muriatic acid according to Dr. de Vrij's method, was used, with the subjoined results:—
(a) 58.68, (b) 39.61, (c) 13.88. Hence alcohol scarcely extracted more alkaloids than water did, namely, 65.97 against 64.42 per mille, while acidulated water only took up 58.68 out of a total of 75.92 per mille contained in the bark treated. This result of M. Landrin's is in contradiction with generally accepted opinions, but if he is wrong it will beeasy enough to prove the fact. At the same time, in favour of the acid menstruum, he says it requires much less liquid than either of the two others; when evaporated down to the weight of the bark treated, it affords an extract more readily soluble in most solvents, especially water; and, finally, theflavour of the extract is much more natural than when prepared with either boiling water or alcohol. In conclusion, for the reasons just given, M. Landrin thinks acidulated

GERMAN PHARMACEUTICAL NEWS.

(From our Berlin Correspondent.)

SULPHONAL.—It has been stated that sulphonal has up to now been administered in more than 1,000,000 cases.

PHOSPHORUS. — Spluttering from lighted matches has frequently done mischief. There is a very simple and efficacious method of counteracting the injury. The affected part should be at once placed in a strong solution of common soda; all pain disappears instantaneously, the phosphorus being transformed into the harmless phosphate of soda.

West African Cocoa.—The first crop of West African cocoa has just arrived in Hamburg. The high expectations entertained for some time with regard to this new cocoa proved fully justified. Competent judges say that the beans are as valuable as Bahia beans. Further lots are expected from the 120,000 cocoa trees which were planted three years ago and have already attained a height of 10 to 12 feet.

SAFFRON ADULTERATION.— An interesting case of adulteration of saffron has recently occurred in Giessen. Chalk, flores carthamis, tonka beans, bitter almonds, sugar, &c., were mixed with saffron, and artificial colouring substances were also added. The adulteration amounted to 20 per cent. At least sixty flagrant cases have been officially stated, each case yielding to the adulterator a profit of 2l. An example was made in one case, and in that the defendant excused himself by stating that he "was simply working according ta his father's recipe," but his father's memory did not avail. He was condemned to pay a fine of 300l. and costs.

Spectroscopic Analysis of Extracts.—At a recent meeting of the Hamburg Altona Scientific Society Dr. Sick read a paper on "The Spectra of Vegetable Extracts," with special reference to the extracts used in pharmacy and medicine. By a number of demonstrations Dr. Sick showed that each extract has its special line or lines of absorption in the spectrum. These lines are, according to his experiments, just as constant and characteristic as the well-known absorption-bands of metallic vapours. It is, therefore, probable that these spectroscopic relations will furnish very good means for analysing vegetable extracts. The author says that further investigations are necessary, and he has no doubt that results will be obtained highly important from a theoretical, as well as from a practical, point of view.

METHACETIN is another new antipyretic. According to its chemical composition its full name should be acet-para-anisidin. Similar to phenacetin, or acet-para-phenetidin, it is derived from amido-phenol. The relation of these compounds with antifebrin (acetanilid) is shown by the following formulæ:—

 $C_{\varepsilon}H_{\bullet} \stackrel{H}{\underset{NH.(CH_{3},CO)}{\times}} C_{\varepsilon}H_{\bullet} \stackrel{OC_{2}H_{\varepsilon}}{\underset{NH.(CH_{3},CO)}{\times}} C_{\varepsilon}H_{\bullet}$ Acetanilid Phenacetin $C_{\varepsilon}H_{\bullet} \stackrel{OCH_{3}}{\underset{NH.(CH_{3},CO)}{\times}} C_{\varepsilon}H_{\varepsilon}$ Methacetin

Methacetin, as used in Mahnert's experiments, is a slightly reddish, odourless powder of saltish bitter taste. The powder is composed of the fine crystalline scales, which melt at a temperature of 127° C. It is soluble in cold water, more so in warm water, and still more in alcohol. So far the new remedy has only been administered in febrile diseases of children. The abatement of temperature was gradual, and lasted for some hours. Perspiration was copious. In one case collapse sct in; otherwise no disagreable after-effects were observed. The dose for children was 3 to 5 grains.

THE PREVENTION OF PHTHISIS.—A highly interesting paper has been read before the Berlin Medical Society on this subject. The author maintains that thousands of cases of phthisis might be prevented if only the public, and especially patients affected with the discase, would in some way or other be induced to use certain very simple precautions. It is generally acknowledged that no tuberculosis exists without tubercule bacilli. By making these innoxious a great part of the battle is won. Dr. Carnet says that the sputa of phthisical patients ought to be treated with special care, as forming one great means of spreading the disease. The sputa ought never to be taken into the pocket-

handkerchiefs, or, still worse, left on the floor or grounds. A phthisical patient ought to carry with him a small spittoon containing 5 per cent. of carbolic acid, with some sulphuric acid. This is the best and most reliable disinfectant for sputa, and preferable to perchloride of mercury or carbolic acid alone. It is not to be expected that by this simple measure tuberculosis will soon die out, but some diminution might be expected. At present one-seventh of the deaths result from tuberculosis; in Prussia alone there are annually not less than 90,000 deaths from this disease. The reduction of only 1 per cent. of this number means a considerable gain.

AUSTRALIAN PHARMACEUTICAL NEWS.

AUSTRALIAN LABELS.—The Chemist and Druggist of Australasia says:—"At first sight no one would believe that it would be possible for British and American printers to compete successfully for the custom of Australasian pharmacists. In addition to the duties imposed on stationery and advertising matter, there are the costs of freight and handling, and the disadvantages of the great distances and consequent slow communication. Nevertheless, we find nearly every enterprising pharmacist sending to Britain or America, or both, for his handbills, labels, prescription envelopes, and the like; and putting aside all considerations of taste and artistic effect, he can lay them down, even in Melbourne, at considerably less than the cost of local productions. When the artistic effect of Australasian and foreign productions is compared, the balance is also entirely in favour of the foreigner. There may be difference of opinion as to the respective merits of the British and American styles, but hardly anyone would put Australian productions, in the way of chemists' labels, on a level with either. The style and general appearance of a label is not a small thing. fastidious and fanciful taste of the invalid—who ought to be-the chief source of the pharmacist's income—is easilyoffended, and the greater neatness and refinement of a labels may divert profitable custom from one business to another. Labels are the pharmacist's signboards, only instead of being confined to a single spot they may be scattered all over the country, multiplying the signboard a thousandfold."

THE FIRST DENTISTS REGISTER for Victoria, just issued, contains 486 names. Of these, no less than 276, or 56.79 per cent., appear as practising dentistry in the colony with pharmacy before the passing of the Act.

"ROUGH ON RATS" was the poison chosen by three suicides in New South Wales during February.

THE PHARMACEUTICAL SOCIETY OF AUSTRALASIA held its annual meeting on February 5, and the report and balance-sheets then adopted have been published since. The members of the Society now number 340, and of these 258 are residents in Victoria. This is an indication of the absurdity of the title which this essentially Victorian society has assumed.

PHARMACEUTICAL EDUCATION IN AUSTRALASIA.—The March number of *The Chemist and Druggist of Australasia* contains particulars of the examinational requirements and the educational facilities in connection with pharmacy, medicine, dentistry, and veterinary practice throughout Australasia.

THE MELBOURNE EXHIBITION.—A further list of awards has now been published. The jury on chemicals "regret very much that these awards could not be made public before the closing of the Exhibition, but it [? what] was unavoidable." The list now published includes the following:—

FIRST ORDER OF MERIT—SPECIAL MENTION.

BRITISH.

Greenbank Alkali Company, St. Helen's—Alkalics. Union Alkali Company, Manchester—Chemicals. Thomas Whiffen, Battersca—Chemicals.

GERMANY.

Dr. Theoder Schuchardt, Görlitz-Chemical products.

AUSTRIA.

F. A. Sarg, Son & Co., Vienna-Chemical products.

SOUTH AUSTRALIA.

Eugelbrecht & Co., Mount Gambier—Spirits of winc. B. Seppelt, Seppeltsfield—Spirits of wine.

VICTORIA.

J. Bosisto & Co., Richmond—Chemicals. Cuming, Smith & Co., Melbourne—Acids and manures.

FIRST ORDER OF MERIT.

BRITISH.

W. Baird & Co., Glasgow—Chemical products.

Bell Brothers (Limited), Middlesborough—Alkalics.

Bruuuer, Mond & Co., Northwich—Alkalies.

A. Boake, Roberts & Co., Stratford—Caramels and finings.

Bratby & Hinchliffe, Manchester—Essential oils.

Barnett & Foster, London—Ingredients of a Grated waters.

J. Chambers & Co. (Limited), London—Chemicals.

Gaskell, Deacon & Co., Widnes—Chemicals.

S. & H. Harris, London—Polishes and plate-powders.

May & Baker, London—Chemicals.

Muspratt & Sons, Liverpool—Acids.

Price's Pateut Candle Company (Limited), London—Candles.

E. F. Sanders, London—Lignozote.

The St. Bede Chemical Company (Limited), Newcastle-on-Tyne and London—Chemicals.

QUEENSLAND.

L. J. Maas, Townsville—Soap. Queensland Commissioners, Brisbane—Essential oils.

UNITED STATES.

The Matchless Metal Polish Company, Chicago-Metal polishes.

FRANCE.

L. Gilles & Co., Paris—Apparatus for manufacturing mineral waters.
Malligaud & Sous, Paris—Alcohol meters.
Durafort & Sons, Paris—Syphons and apparatus for acrated waters.
E. G. Thessier-Fevre, Paris—Seltzogenes.
F. Dehayniu, Paris—Chemical products.

GERMANY.

Heinrich Haensel, Pirna—Essential oils.

Stassfurt Industry, Stassfurt—Chemicals.

B. Anilin and Soda Fabrik, Stuttgart—Dyes and colours.

Dr. F. Wilhelmi, Leipzig-Reudnitz—Chemicals.

Lindenhahn & Giesel, Leipzig-Rendnitz—Volatile oils, &c.

Stettiner Chammottefabrik Action, vorm. Didier, Stettin—Retort furnace models.

AUSTRIA.

F. Wilhelm & Co., Vienna-Chemicals.

There are no British exhibitors in the second and third order of merit, and those who are named in those classes are makers of soap, candles, and alcohol. In the fourth class the following British exhibitors are included:—

Day & Martin, London and Liverpool—Polishing pastes.

J. Goddard, Leicester—Plate powders.

T. Jennings, Cork—Magnesia.

Keen, Robinson, Belville & Co., London—Laundry blue, collective.

Malleu & Co., Dublin—Butter colouring.

W. G. Nixey, London—Black lead.

Pure Peat Plate Powder Company, London—Plate powders.

PERFUMERY AND TOILET REQUISITES.

The annexed list of awards has been made. The chairman of the jury, after describing the close attention which he and his eolleagnes have given to their duties, says "they believe that the results of their adjudication must give satisfaction." This jury must be very fresh to its work. The chairman further adds that "the jury greatly regretted that the British exhibits were not more, so many of the most famous and best-known makers being conspieuous by their absence. The French and German perfumers and distillers have taken a deservedly very high position. We hope that in time the colonial makers of perfume will attain a higher place than they have done at this Exhibition. Recognising, however, their efforts in open competition, the jury have given several colonial exhibitors honourable mention for their goods for purposes of general encouragement."

The following is the list of the awards:-

FIRST ORDER OF MERIT.

F. S. Cleaver & Sons, London-Perfumery and toilet soaps. Crown Porfumery Company, London-Toilet soaps. A. & F. Pears, London-Toilet soaps. Prico's Patent Candle Company (Limited), Londou—Toilet soaps. Warrick Frères, Grasse, Frauce—Perfumery. Bertraud Roure & Sons, Grasse, France-Perfumery. Tombarel Frères, Grasso, France-Perfumery. J. Giraud & Sons, Grasse, France—Perfumery and toilet soaps. F. Millot, Parls, France—Tollet soaps. Veuve Millot, Paris, France—Toilet soaps. Ladd & Coffin, New York—Perfumery. Colgate & Co., New York-Toilet soaps. Gustav Lohse, Berlin, Germany-Perfumery and toilet soaps. Joh. Maria Farina, Cologne, Germany-Eau de Cologne. Anton, Saeuberlich, Ludwig, Zwickau-Toilet soaps. F. Wolff & Sohn, Karlsruhe-Toi'et soaps. McDougall Brothers, London-Sanitary soap. L. Leichner, Berlin—Toilet requisites. J. G. Popp, Vieuna—Toilet soaps. F. A. Sarg, Son & Co., Vienna-Toilet soaps.

SECOND ORDER OF MERIT.

E. R. Biggleston, Canterbury, England—Perfumery.
Crown Perfumery Company, London—Perfumery.
Irene & Co., London—Perfumery.
Veuve Millot, Paris, France—Perfumery.
J. Richardson & Co., Leicester, England—Toilet soaps.
Franz Spielbagen, Berlin, Germany—Toilet soaps.
H. Kielhauser, Graz, Styria, Austria—Toilet soaps.
Dr. Heury Field, New South Wales—Toilet soaps.
W. H. Burford & Sons, Adelaide, South Australia—Toilet soaps.
Colgate & Co., New York—Toilet waters.

THIRD ORDER OF MERIT.

H. Sardou & Co., Loudon—Perfumery.
F. Millet, Paris—Perfumery.
Western Perfumery Company, San Francisco—Perfumery.
F. Wolff & Sons, Karlsruhe—Perfumery.
J. Kitchen & Sons, Melbourne—Toilet soaps.
Lewis & Whitty, Melbourne—Toilet soaps.

HONOURABLE MENTION.

Locbbel & Co., Berlin—Perfumery.
Lithgow & Co., Hobart, Tasmania—Perfumery.
Hatton & Laws, Lannceston, Tasmania—Perfumery.
F. S. Browne & Co., Launceston, Tasmania—Perfumery.
A. Evans, Launceston, Tasmania—Toilet soaps.
Quibell Brothers, Newark, England—Sanitary soaps.
J. B. Williams & Co., Connecticut—Toilet soaps.
W. Ball, Melbourne—Perfumery.
J. K. Blogg & Co., South Melbourne—Perfumery.
W. Bowen & Co., Melbourne—Perfumery.
F. Longmore, Melbourne—Perfumery.
W. Wilson, Brunswick—Perfumery.
W. M. Rowley, Melbourne—Perfumery.
W. Ball, Melbourne—Toilet requisites.
J. M. Heine & Co., Germany—Toilet requisites.
Western Perfumery Company, San Francisco—Toilet requisites.

In the printing and stationery section Mr. J. Hickisson, proprietor of the Crystal Palaee marking-ink, gets a first-class award; and a similar honour is conferred on Messrs. W. & T. Avery, Birmingham, for letter and post seales; on the Denison Manufacturing Company, Shoe Lane, for direction tags, gummed labels, &e.; and on George Stewart & Co., 92 George Street, Edinburgh, for sealing-wax.

CANADIAN PHARMACEUTICAL NEWS.

THE ONTARIO PHARMACY BILL was assented to on March 23. [In our issue of that date, page 403, will be found the principal features of the Bill.] The curriculum clause is one of those which survived the ordeal. Originally this part of the Bill required apprentices to serve four years, and in addition to attend two courses of lectures. A new subsection provides that the time spent in attending one of these courses—the first—shall count as part of the term of apprenticeship. The promoters have failed in an attempt to

provide that all the individual members of a partnership, firm, or association, should be registered. A similar proposal was made in Great Britain in 1884. The new regulations regarding the sale of carbolic acid, chloral hydrate, and cocaine and its preparations have been agreed to, but the legislature has refused to restrict the sale of Paris green. Altogether the effect of the new Act will be to consolidate the law and to make the position of pharmacy in Canada much more favourable than hitherto.

The Retail Druggists of Toronto have resolved to constitute themselves into a society, to be called "The Toronto Retail Druggists' Association." The primary object of the preliminary meeting held last month was to secure proper representation on the Ontario College of Pharmacy Board as reconstituted, but the ultimate objects of the association will be to promote social feeling, and to advance and protect the commercial and technical interests of the members. It is proposed to hold monthly meetings, and to limit the membership of the association to those who are actually in business as retail druggists in Toronto. The first president is Mr. J. C. Lander, and he has associated with him Mr. A. Jeffrey as vice-president, and Messrs. J. H. McKenzie, G. W. Mingay, W. Murchison, H. Miller, and J. H. Hargreaves as an executive committee, with Mr. W. Lloyd Wood as secretary and registrar.

THE NEXT ELECTION of the council of the Ontario College of Pharmacy will be of much greater interest than any previous one, not excepting the famous election which was set aside owing to the doctoring of the voting-papers. Under the new Act the Council has power to make a by-law dividing the province into thirteen territorial divisions, each of which will return a member of council. There is little probability that the council will not formulate such a law forthwith, and, three months after the Lieutenant-Governor assents to it, it will come into force.

MR. J. M. McFarlane, Junr., has bought the St. Andrew's Pharmacy at 181 King Street West, Toronto, and has secured as manager Mr. Alex. McLaren, late of Hooper & Co.'s and of the Astor House Drug Store, New York City. Mr. McFarlane himself is a prominent auctioneer of the city, but has not hesitated to make the fact known by newspaper advertisement that he has embarked on the troublous seas of pharmacy, irrespective of the legislature's commands. It is noteworthy that the late owner of this business absconded.

Amongst the businesses which have lately been disposed of in Ontario are the following:—Mr. T. W. Yeoman's, King Street East, Hamilton, sold to Mr. J. A. Zimmerman of the same town. One of the oldest pharmacies in the province, carried on at Oddfellows Hall, St. Catherine's, has been sold by Mr. James Mills to Mr. George Parke; Mr. Mills was over forty years in the business. Mr. F. B. Carman, of Morrisburg, has sold out to Mr. J. Bruce.

THE FIRST EXAMINATION under the new regulations will be held in the Ontario College of Pharmacy buildings, St. James's Square, Toronto, on Monday, May 13.

MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

NAYLOR—BROWNLOW.—On April 11, at East Bridgford, Nottinghamshire, Mr. W. A. H. Naylor, pharmaceutical chemist, London, to Miss Eleancr Brownlow, of East Bridgford.

DEATH.

COTTRILL.—On April 6, Mr. Gilbert Jones Cottrill, chemist and druggist, Shepton Mallet. Aged 61. Mr. Cottrill had been in business in Shepton Mallet for over thirty years, and had previously been connected with the London press. He was apprenticed to the trade at Ludlow, and was for some years manager for Messrs. Holman & Ham, of Exeter. He held a prominent position among the Masons, and was a P.M. and Past Treasurer of the local lodge. His Masonic brethren and fellow-towns en attended his funeral in large numbers.

Personalities.

MR. JOHN WILLIAMS has succeeded to the business of Mr. William Morgan, Market Place, Abersychan.

MR. W. GILLAM GALE has purchased the business lately carried on by Mr. J. Ord Smith at 4 Dalston Lane, Kingsland, N.

SIR ANDREW CLARK, M.D., F.R.S., was on Monday reelected president of the Royal College of Physicians of London on Monday last.

MR. CHARLES B. GILSON, of the British Pharmacy, Mentone, has taken the degree of Pharmacien de deuxième Classe for the Alpes Maritimes. Mr. Gilson was one of our "Corner for Students" prizemen in 1886, as well as a "Square" medallist.

Mr. A. P. Barnard, of 76 Columbia Road, Hackney, has opened a branch shop in Bishop's Road, Cambridge Heath. Mr. Barnard was returned at the head of the poll at the election of guardians for St. Matthew's, Bethnal Green, last week.

MR. PAUL KYMENTHAL, who up to within a few months ago had charge of the quinine and bark department of Messrs. Heilgers & Co., the representatives of the Mannheim Quinine Works, has commenced a commission and agency business in Moscow, of which city, we believe, he is a native.

MARY PONSFORD GOULD, the daughter of the late Robert George Gould, chemist, Andover, is a candidate for admission to the Royal Masonic Institution for Girls. Mr. Henry G. Dalgleish, of 7 Park Place, Exeter, or Mr. John Morris Broad, 510 Hornsey Road, London, will be glad to receive votes on her behalf.

MR. R. ROTHER, of Detroit, is to start in that town an experimental pharmaceutical laboratory, mainly at his own expense; but as it is likely to be of benefit to pharmacy at large-he desires the co-operation of all pharmacists. As far as we can gather, this co-operation is to take the form of the purchase of Mr. Rother's books. The work done at the laboratory will be published in pamphlet form at the end of each year, besides being reported in the pharmaceutical journals. The pamphlet will be sent free to the contributors.

Mr. J. T. Brunner, M.P., has for some time back been attacked by Mr. H. H. Champion, the Socialist, who has repeatedly stated in his paper, the *Labour Elector*, that Mr. Brunner, as a partner of the firm of Messrs. Brunner, Mond & Co., is guilty of sweating and culpable carelessness, resulting in the loss of life and personal injury to a large number of the workpeople. Mr. Brunner now replies by starting an action for libel against Mr. Champion, and has retained Sir Charles Russell, Q.C., M.P., Mr. Finlay, Q.C., M.P., and Mr. Asquith M.P., as his counsel.

MR. WILLIAM MARTIN SEARBY, pharmaceutical chemist, San Francisco, professor of materia medica in the California College of Pharmacy, is a Lincolnshire man, and was born there in 1835. He received his pharmaceutical education in this country, and passed the Major examination in 1855. The next year he went to California, and in 1873 he was appointed to the chair of materia medica in the College of Pharmacy. The *Pharmaceutical Era* states that he has thrice been appointed president of the Pharmaceutical Society, and his frequent contributions of papers, especially upon pharmaceutical educational matters, have added much to the pleasure and profit of the meetings. Professor Searby is an able and flucnt speaker, in style of address particularly pleasing.

MORPHINE SOLUTIONS.—Dr. Lamal, of Anvers, has arrived at the conclusion that watery solutions of salts of morphine become turbid, coloured, and of an acid reaction when kept for some time. This turbidity is due to two causes—the formation of mycelia, and the deposition of crystals. The colouration and the acidity have also in part a common cause, the formation of acid morphetine; more or less oxymorphine is also generated, which sets free a part of the acid in combination with the morphine. Oxymorphine has no therapeutic properties, so that these old solutions do decrease in narcotic strength. It would have been important for Dr. Lamal to have told us how much.

THE DISGRUNTLED GREENGROCER. A QUEER STORY: BY SILAS MAINVILLE.

> ERTAINLY the most popular green-grocer in X— was Mr. Playfair. His shop was in the principal street, and a very attractive shop it was, too, with piles of luscious fruit and vegetables adorning the windows and encroaching on the broad side-walk as far as the law allowed. With much forethought and energy every requirement of the townspeople in his line was anticipated, and everybody knew that he was sure to get the best and freshest of seasonable vegetables from Mr. Playfair, as also oranges from Jaffa and Malaga, dates from Algeria, apples from America, and pines from Singapore and from the hot-houses of the Duke of Vastlands, who was supposed, however, to cultivate them for the pleasure of presenting them to his friends and tenants. The interior of the shop was even more attractive than the outside display, for the baskets and barrels of fruit were

interspersed with flowers and plants, and overshadowed with a luxuriance of ferns and palms and broad glossy leaves of banana and aloe, while a sparkling fountain filled the shop with rippling music. But the proprietor himself was the chief attraction, with his jovial face, kind manner, and accommodating disposition. He was always on hand to serve his customers personally, and his great politeness in taking the trouble to show them everything new induced them to buy twice as much as they had intended, and thus doubled his trade. He was held up as an example to all the boys in town by their ambitious parents, and, being a bachelor of thirty, with a substantial fortune acquired by personal industry, he was considered among the ladies as the greatest catch in the county. He had almost a monopoly of the good custom, and, though the other greengrocers had but the leavings of the trade, Mr. Playfair was on the best of terms with all of them. Among the other greengrocers in the town was a Mr. Foxley, whose shop was just opposite. He was a new-comer, and was sccretly very envious of Mr. Playfair's business and reputation, and, though he professed the greatest friendship for him, it was only as a means to undermine his position. Mr. Playfair's abundant stock and his strict and polite attention to business kept his trade firmly together, and it increased steadily against all the artful machinations of his secret adversary. Mr. Foxley, therefore, determined, if possible, to compass his ruin by strategy.

He invited him to dine one evening, and, after the ladies were out, trade matters were discussed over eigars and

"You know," said Mr. Foxley, "these fruit-growers, manufacturers, and florists are making catspaws of us by getting us to push their goods; we should do much better to discourage the sale of their stuff, and supply our own productions instead of theirs, for we should then get both the

producers' and dealers' profits."

But Mr. Playfair replied, "That would be hardly right, for these people advertise their things as sold by greengrocers. They give us samples and circulars for distribution to our customers, thereby ereating an additional business for us, and, though the prices are sometimes cut by competition, so are the prices of the staples, such as eabbages and potatoes. margin is not large, but the sales are, and the goods easy to handle, besides which our customers want them.

"Well," said Mr. Foxley, "when I get rid of my stock I shall push my own goods solely, and, for your own sake, I advise you to do the same." Then the subject was changed to polities and trade news till it was time to join the ladies, and, Mr. Foxley plainly saw that Mr. Playfair could not be eaptured that way.

But Mr. Playfair was a constant reader of the leading

trade paper, the Greengrocer, and one day was much impressed by the following letter in the correspondence column :--

" To the Editor of the Greengrocer.

"DEAR SIR,—It appears to me greengrocers are making a great mistake in introducing and selling the fruits and vegetables raised by farmers and advertised in our own names. These farmers may be a rascally lot for all we know, and doubtless use some disgusting fertilisers. Besides this the prices of their stuff are cut very low by competition among greengrocers, and even drapers and chemists handle them. Why, I ask, have we as apprentices worked long years to learn our profession, and been examined by our masters as to our ability? Is it merely that we may know how to sort and appraise barrels of apples and discriminate as to the respective commissions to be paid to butlers, cooks, and servants of the upper and middle classes? Shall base wholesale kitchen-gardeners and farmers have any of the credit; shall we longer divide the profits and be mere dealers in the produce of others? Let us rather determine to supply our own articles as substitutes, in the interests of the public and for our own sole credit and profit. Let us band together and boycott the miscrable crew of producers for the trade. Their profits are enormous. But for us they could not exist. Let us endure their robbery no longer, but combine to choke off this evil which is preying upon us.
"DISGRUNTLED GREENGROCER."

This letter made a deep impression on Mr. Playfair, all the more as it endorsed fully the opinions of Mr. Foxley, and emphasised them. His vanity was appealed to as a professional man. His duty to the public, as their protector and supplier of sanitary fruits, vegetables, and provisions, and his pocket, too, appeared to be picked by those who were said to be making enormous profits on the goods he bought of them. No doubt Mr. Foxley was right, had given him fraternal advice; he would go round and apologise to him and make a combination with him for mutual benefit and for

choking off the wicked and designing wholesale producers.

Mr. Foxley of course fell in with the boycott and combination idea, and said he would like to read the "Disgruntled" letter; and then, though it was very Radical, said he would subscribe to its terms to meet the wishes of Mr. Playfair, who immediately went back to his shop, wrote to the producers and manufacturers that he was going to boycott their goods and return to them all circulars, samples, and showcards. He then packed up and got ready to send back all goods on consignment, and moved his remaining stocks of their things into the back-yard. He brought all his stock of potatoes and cabbages to the front, where they filled the windows, counters, and shelves. When his sweetheart passed that way in the evening, and her eyes were no longer delighted with the flowers and beautiful foliage, but saw only cabbages and potatoes everywhere, they were filled with tears, and she hardly recognised in a perspiring workman who greeted her the handsome and tidy lover of yesterday. Although he explained fully the reason of the new departure he could not convince her, for the prospect of being queen of a potato and cabbage shop did not take her poetic fancy, and she refused to allow him to accompany her for the usual evening stroll, but went home for a good cry. Had he not offered her the usual bunch of flowers, saying it would be the last? Had she not seen him basely washing potatoes and cabbages in the beautiful fountain? What desecration! cabbages in the beautiful fountain? What desecration!

The smile of triumph on Mr. Foxley's face when Mr.

Playfair called in the evening to show copies of the letters he had written to the wholesale producers and manufacturers seemed but a dry recompense for the beaming light of his sweethcart's eyes, and the kisses he sometimes stole in the shady village park. However, he sought consolation and courage in reading again the letter of the "Disgruntled Grocer," and was so proud of having begun his duty in the suppression of "the evil which is preying upon us" that he quite forgot to read the Scripture texts for the evening. Dreams can never be accounted for, but all night he dreamed that his sweetheart was walking through the woody park, hanging on the arm of Mr. Foxley; that he afterwards saw that gentleman, through the first-floor window, in the parlour all night long, busily writing letters and addressing circulars, the purport of which he could not ascertain, though strain-

ling his eyes to do so.

Next morning his customers came as usual to give their orders for the day, and hy ten o'clock the shop was crowded. Many of them seemed painfully surprised at the transformation, but had no opportunity of inquiring the reason, as Mr. Playfair had not finished an argument with his first eustomer, who vainly insisted that he really wanted a pineapple, a bottle of Worcestershire sauce, and a tin of Jones's tomatoes. Cabhages and potatoes, Mr. Playfair urged, were less expensive and very wholesome substitutes. "Besides which," he added, "these things you ask for are produced and manufactured by persons for whom I cannot vouch. may he great rascals, and if anyone is poisoned by their goods they are a long way off and perhaps irresponsible." In vain the customer argued that he had always found the articles good; that, in fact, they were improved every year. Mr. Playfair informed him that for the protection of the public and in the interests of the profession and trade he had decided not to keep or sell anything hut his own products. So the eustomer went away in a huff, saying he thought the public could proteet themselves in such matters, as they were not all children or idiots, but that Mr. Playfair appeared to be himself travelling in the direction of the asylum.

The next eustomer, who with others had been impatiently waiting to have his orders taken, having overheard the argument, asked only for potatoes and cabbages, but determined that he would transfer his whole account to a tradesman who would supply him what he wanted. Mr. Playfair, seeing that the public would have something else besides eabbages and potatoes, followed the advice in the "Disgruntled" letter by buying more land, arranging to cultivate every variety of fruit and vegetable, and to erect half-a-dozen little factories for the preparation of pickles, jams, sauces, mustard, and so forth, in order to manufacture everything that he sold. He had to superintend and assist at these enterprises, and leave his clerk and small boy to wait upon his eustomers; but they wanted to see the principal, and got tired of being told that he was in the back-yard and much engaged in manufacturing. So one by one they transferred their trade to Mr. Foxley, who was at hand to aecommodate them with everything they wanted, and to privately inform them that he had secured agencies previously belonging to Mr. Playfair, who, he was very sorry to say, was neglecting his business and going into reckless speculations, which would probably result in his financial

After much expenditure of time, and the investment of all he had and could borrow, in his farm and factories, poor Mr. Playfair found that his products were not equal in quality to those produced or made on a larger scale, and that they cost him more money. He was very much staggered on balancing his books to find himself quite unable to pay his bills, some of which were considerably overdue. The friendly interest manifested by his brother-tradesman induced him to call for the favour of a loan. Mr. Foxley sat by his new desk in the evening, where he was busily engaged endorsing numerous cheques for deposit, and one for the payment for a diamond brooch for the belle, and another of 1,000*l*. for the purchase of the adjoining premises. Mr. Foxley expressed great surprise and regret at the ill-success of his neighbour's adventures, but assured him that he was on the right track, and bade him take eourage and persevere. But when Mr. Playfair asked for a loan to bridge over his temporary difficulties, Mr. Foxley said, "My dear friend, anything but that. I really cannot spare it." Mr. Playfair did not detect the smile of mock sympathy on Mr. Foxley's face, and was going away with the impression that he was the best friend he had in the world, when his despairing eye happened to rest on a stray sheet of blotting-paper on the floor, which bore many imprints of written words. In a fit of abstracted despair he began to decipher them while Mr. Foxley went to wait on a eustomer. What singular words !—"nworB senoJ & oC. esaelp dnes-stnega-deltnurgsid-tseraeD aruaL"; and then he thought he heard her voice in the front shop saying, "I really eannot accept your present, Mr. Foxley, for I still love Mr. Playfair, and I don't love you." He would try reading the words backwards: "Brown, Jones & Co.—please send—agents—disgruntled—Dearest Laura"; and then he thought, Can it be recalled that Mr. Foxley is the "Disgruntled Grangement?" be possible that Mr. Foxley is the "Disgruntled Greengrocer?" The door was half open, and he could see behind the counter and on the shelves in the rear of the shop fresh consignments of the goods Mr. Foxley had promised to boycott. His dis-

appointment and jealous rage knew no bounds, and he rushed into the shop with the piece of blotting paper in his hand, which he held under Mr. Foxley's astenished eyes and said, "Are you the author of the 'Disgruntled' letter and of my ruin!" Mr. Foxley's silence and the fear written upon his face were his accusers. Mr. Playfair gave him a blow on his ear which brought him to the floor, and then turning to the frightened Laura, Mr. Playfair said. "That miserable Foxley is the cause of my boycott of the flowers and fruits and factory-made preserves and-fortune. And I thought until I heard you speaking to him just now that he was the cause of my loss of your love also."

"Do you indeed love me still?" she said, with her eyes full of regretful and sympathetic tears; "and will you make the shop as it used to be?" His arms were open, and she fell into them while he said, "Yes, my dear, and a great deal more so." Then turning to Mr. Foxley, she said, "Now that I see that your pretending to be his friend has been the cause of his folly and misfortunes, I just think you are the meanest man alive, and I hope I shall never see your hypocritical face again."

And she did not; for Mr. Foxley was invisible the next day, and that night left town for good. He was missed by none but the sheriff, who found his assets insufficient to meet his liabilities. He was last heard of in America retailing oranges on the side-walk. Assisted by the skilful hands of his fiancie, Mr. Playfair's shop was soon more tastefully and beautifully arranged than ever, and a month later the belle of the village presided over the prettiest corner in the town, where she assisted in dispensing the best of everything in the way of flowers from Nice, fruits from everywhere, and other blessings such as preserves from the best manufaeturers in the world. Mr. Playfair's losses on his fruit farm. and factories were soon recovered, and when he reads letters in the trade journals of the "Disgruntled" sort, he says, "They may fool some honest grocers, but not this one again."

Trade Potes.

TEN native Cherokee Indians are sailing from New York for England this week for the purpose of distributing advertising matter for Sequah (Limited).

Mr. Josef Neufeld informs us that he has established a wholesale business in drugs and medicinal herbs at Sassin, viâ Hohenau, Hungary.

A NEW PROSPECTUS of the Westminster College of Chemistry and Pharmacy, Trinity Square, S.E. (Messrs. Wills & Wootton's), has just been prepared, and an early copy has been sent to us. It covers eighty octavo pages, and describes in full detail the courses of instruction given at this college, with particulars of times, fees, &c. Illustrations of the lecture-hall, laboratories, and dispensary are also included.

THE FOOD PRESERVATION COMPANY (LIMITED).—This company has been registered with a capital of 1,000,000l. in 51. shares, to acquire the patents, &c., of the Egyptian Food Preserving Company. The first subscribers are A. E. Weaver, 12 Dubross Road, Brixton: A. E. Tracy, 22 Senegal Road, S.E.; G. C. Hodgson, 27 Baroness Road, Hackney; D. C. Craigie, 95 St. James's Road, Tooting; A. C. King, 86 Leadenhall Street, E.C.; C. Palmer, 51 Newton Street, Hoxton; J. J. Watts, Whitton Road, Hounslow. The first directors are H. B. Burnell and R. T. Hermon-Hodge. Qualification, 2501. stock. Remuneration, 3001. per annum; with an additional 3001. for the chairman, and an additional 5 per eent. of the net profits after the payment of $7\frac{1}{2}$ per eent. dividend.

Pasteur's method for exterminating rabbits in Australia by means of chicken-cholera has not heen a success. The cholera will not spread from rabbit to rabbit.

THE men employed by the Jarrow Chemical Company at Friar's Goose in making salt-cake have struck for an advance of wages, and have so thrown the whole of the hands, numbering 540, out of employment.

AN OLD LONDON DRUG-SHOP.

A FEW WEEKS ago we briefly referred to the approaching demolition of the old drug-shop at the sign of the Golden Key, 18 Norton Folgate, carried on by Messrs. John



Beedzler & Co. The house in which this business is carried on is just without the City bounds, so that we cannot rank the pharmacy along with those notable and ancient ones in the City which we described about three years ago. But the Golden Key has an interest of its own, and its age entitles it to stand by itself as one of the historic houses of London. When the premises first came into note as a drug-shop there is no authentic record to show, but from previous proprietors the present owner, Mr. Alfred George Aunett, has learnt, and local tradition supports the statement, that during the plague of London

that during the plague of London in 1665 a free medicine-stall was opened in the Spital Market, and the drugs were supplied by the Golden Key druggist or apothecary of that day. However that may be, it is at least certain that Mr. Annett is the seventh owner of the business as it now is, the first having been a herbalist named Gilchrist. What we may call the pre-historic apothecaries are represented by the skeleton of one of them now hanging in the laboratory of the Golden Key—and a puny man he must have been. We do not suppose that Mr. Gilchrist, the herbalist, could have been a dispenser of prescriptions, and that is our reason for saying that he must have lived before 1780, the year in which the oldest prescription-book of the shop commenced. By this time, we take it, the business had come into the possession of Mr. Fouch, who carried it on until 1821, and that so successfully as to enable him to spend much of his fortune in charitable objects, he being the first to contribute to St. Mary's Schools in Spitalfields, while a great portion of his property, after his widow's death, went to the schools. The proverbial oldest inhabitant states that Mr. Fouch was of French origin; perhaps there is some confusion here with the name of his successor, Mr. James French, who continued in the business until his death in 1836, when it passed into the hands of his son, Mr. Joseph French, and his nephew, Mr. John Sadler. The latter did not long enjoy it, and dying left his share to his widow and family. This bequest was the cause of a prolonged litigation, in which Mr. Joseph French was the defendant, and ultimately the loser. As the result he was seem and the part with the hardward to a Mr. Wester who compelled to part with the business to a Mr. Weaver, who, after a successful career, sold it to Mr. John Beedzler, and in 1877 it came into Mr. Annett's hands.

The shop is by no means a pretentious one, indeed it is rather old-fashioned, and exhibits here and there traces of the individual tastes of those who have owned it during the past century. The front shop is double, and the fittings here, together with bottles and jars, are old but respectable; on the counter-cases we find evidence here and there of ancient custom, but generally the specialities are adapted to modern tastes, and there is an evident desire to use the printer freely for the encouragement of business. A small dispensing department is passed on the way to the laboratory, which occupies a separate building at the back of the shop, and here also is a neatly-furnished room sacred to dental operations and the like.

In such an old establishment as this we naturally expect to find many relics of the days gone by: and these are there in plenty, perhaps the most interesting being the oldest prescription-book, dated, as we have said, MDCCLXXX.,

now earmarked by many a finger, and stained with the damp and dust of several generations. Two legal memoranda upon this book tell us that it figured in the High Court of Justice in the "blood mixture" case. Mr. Annett has very liberally allowed us to extract from the book what might interest the trade, and, while not taking too free liberty of the privilege, we give some of the quaint formula and prescriptions. "Fair Custome," to begin with, was, and still remains, the price-mark of the shop. In the earlier pages of

the book we come across a few prescriptions which have so modern a look about them that we might doubt their age, especially as few of the prescriptions are dated; but on page 35 we have the following, which removes all doubt:—

Dr. Littsom's Recipes for a Looseness-pain in ye Bowels, &c., &c.

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Pulv. ipecae. .. Ext. thebaie. ..
                                                          gr. v.
                                                           gr. iij.
                                                       ..
                                                           q.s.
           Cons. rosar.
Divid. in pil. ix. Cap. ij. om. noet. & j. prim. mane.
                                                           Ziij.
          Mistur. eretæ ..
                                                          Ziij.
           Aq. einnam. ten.
           Tr. opii .. ..
                                                          gtt. x.
Capt. coeh. iij. urg. diarrhœa.
           Ol. ricini
                                                           32
                                                       .. 385.
           Mueil. gu. arabic
           Aq. ment. sat. ..
                                                          3ss.
                                                       ..
                                                          3vi.
            ,, puræ
Ft. haust. Mane altern. diebus loco pilular. sumend.
 \frac{22}{x} } 1795.
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In those days chemists could not complain of unprofitable business, far less cutting. For instance, Mr. Divers paid 28. for four draughts, each composed of—

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Infus. gentiau. eomp... ... ... 3x.
Sal. sodæ ... ... ... ... gr. x.
Pulv. rhœi ... ... ... ... gr. v.
Tinet. aromat. ... ... ... ... ... ... ... 3j.
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The very next prescription shows that our forefathers were not unacquainted with the value of tragacanth as a pill-excipient. This is a prescription for a lady:—

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      R. Myrrh. opt.
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Some druggists' recipes occur along with the prescriptions. Here are two:—

SOLOMON'S TURKEY DYE, TO DYE FEATHERS, HAIR, OR SILK.

Put iuto a bottle 38 ol. vitriol.; 3j. Spanish indigo, well pulverised; 3ss antim, crud. p.; 3ij. sal. ammon. c. Stir all well together, and let it stand uncorked 48 hours by fire.

Take care in the process not to mix to mutch water.

(The writer would not have come off very well in a spelling bee.)

AN OLD TOOTH-PASTE. 6. d. §4 Pulv. osepæ 0 8 0 6 3j. " magnesiæ Ol. caryoph. .. 0 1 • • " burgom. .. 0 1 • • Jiij. Gu. corant. rub. 0 9 •• 0 4 3ij. Syr. moror. .. • • Pott and stamp 0 5 2 9 (sic)

To others, 2s. per box.

On page 97 we find a prescription for Mr. Fouch himself:—

		TTTT	TIOD.	BILLIA			
Ŗ.	Ferri	••		••	••		3ij.
	Assafætid	• •	••	••		• •	3ij.
	Gu. guaiac.	••					зij.
	Ext. gentian.		• •	••	••	••	
	" cinchon.	• •		• •	• •	• •	3j•
	Pulv. opii	• •	••	••	• •	••	Эj.
	Syr						a.s.

Mr. Fouch never dated his entries, but early in this century we find the handwriting of an apprentice, and this youth occasionally throws in a date for the benefit of the historian.

On page 112 we find a prescription dated "4 Martii, 1802"; so that in two-and-twenty years Mr. Fouch had covered only 111 pages, and there being about half-a-dozen prescriptions to the page, it is evident that the dispensing business was not a heavy one. The apprentice in question had the weakness of modern apprentices of giving brilliant flourishes to his initial and final letters. "Mr. Shrupp's Receipts for horses," A.D. 1804, occur at the end of the book, along with other small collections. The following for "fever balls" shows that veterinary practice did not eighty years ago differ much from what it is now:—

Mr. Annett is very careful of these relics of other days, and of all that has come down to him from his predecessors. Having fought several important legal cases in his day, notably that of Lamplough v. Beedzler, he appreciates the commercial as well as the intrinsic value of old business-books, and preserves a fairly complete collection of trade price-lists. For example, we may note Barclay & Sons' catalogue for 1860, a small thirty-six-page list, in which we look in vain for Beecham's pills and Clarke's blood mixture; but in William Edwards's list for 1867 we find the now celebrated pills, but not the blood mixture. The progress of the patent-medicine trade during the past twenty years is astounding when we compare these tiny lists with the large



and thick price-books which the wholesale patent-medicine firms now issue. Mr. Annett is an active man of business, still on the bright side of forty, and, though born in the Emerald Isle, his father and mother were Hampshire born. When the Pharmacy Act of 1868 became law he was one of Mr. Peter Squire's right-hand men, and pushing his way on he was able to acquire the Golden Key drug-shop in 1877. We might rightly call this an old family business, and so it is;

family business, and so it is; but Mr. Annett has greatly developed the trade in wine essences, bitters, cordials, and other licensed victuallers' goods of that nature, and this has become the most important part of the Norton Folgate business. Here he employs seventeen persons, four of whom are qualified chemists, and for these he has furnished, in a very home-like and handsome manner, the rooms above the shop, one of these being a billiard-room, and another a drawing-room with piano and the like. Much of Mr. Annett's spare time is spent in etching, an art of which he is very fond. In our issue of March 22 we published an imaginative sketch from his pen, which is ample proof of his ability in this direction. Mr. Annett has told us many interesting things which show his acquaintance with antiquarian lore; but this is not the place to enter into that fascinating subject.

THE USE OF SACCHARIN for aërated beverages is the subject of a patent (No. 15,530, 1887) applied for by Mr. T. Child, 84 Wellington Road, Leeds. He simply proposes to use the saccharin for sweetening the beverages, but the patent is being opposed.

REGARDING the discovery of morphine in Eschscholtzia Californica, Dr. Eccles states (Druggists' Circular) that this is not the first time that morphine has been found in a plant of the order Papaveraceæ, but it is the first time morphine has been found in any genus other than papaver. Eschscholtzia Californica, Cham., is a beautiful golden yellow flower found in abundance on the Pacific coast, and especially around San Francisco, Cal. So much like a poppy is the blossom that it is known wherever it grows as "wild poppy," or "California poppy." The sand hills between the city and the Golden Gate produce it in abundance, and so handsome are its yellow or orange petals that it never fails to catch the eyes of all visitors.

CASCARA SAGRADA.

MR. F. A. BECKETT, of San Francisco, writing to the Pharmaccutical Era, gives a review of the conditions which have brought about the present high price of cascara sagrada, and proceeds to say that three species of the bark are found on the Pacific slope, namely :—Rhamnus Purshiana, Rhamnus Californica, and Rhamnus Crocca, all commonly known as cascara sagrada, sacred bark, and Chittem bark. The first two are best known, and are gathered indiscriminately, are almost identical in appearance, and each is equally good. Rhamnus Purshiana is found in Oregon, and in the northern part of California. Rhamnus Californica is the Californian species, and is that which was named sacred The high price rrling of bark by the old Spanish settlers. the present time is an inducement to the gatherers to furpish an immediate supply, in response to the pressing demand; and as nothing better is to be had, there have already been offered and sold large quantities of old and inferior bark of little therapeutic value. In addition to this, there has also been placed on the market as a substitute or adulterant a quantity of a species of alder bark, which, although similar in appearance and taste to the cascara, is of no value whatever as an aperient. It has been suggested that another substitute is buckthorn bark, but the Californian buckthorn is really no other than the cascara.

The varying differences in the appearance of cascara sagrada are due mainly to the influences of the climate of the locality where the bark is grown and the time of gathering; much of it coming from Oregon is moss covered, while most of the Californian bark—particularly the small quill—has a clean, smooth epidermis. The season for collecting varies according to locality, but the time should be as soon after the rains as circumstances will permit. The bark is then quite rich in extractive matter; it does not cling to the wood, but can readily be peeled off, and curls up in the quill form as commonly found. If the time of gathering is properly chosen, it is said that the large bark of the trunk, and that taken from the surface roots, is just as desirable as the quill bark from the smaller branches. After the sap passes out of the bark it ceases to peel, and in time becomes old and clings to the wood—the technical term for which is that it becomes "hidebound." The knowledge of this condition is of considerable value to purchasers, for when collected at this time the bark has to be taken from the tree with a draw-knife, portions of the wood being shaven off at the same time, and as found in the market it is in flat broken pieces, with a small portion of wood on the inner surface. The bark should be gathered very soon after the cessation of the rainy season; the time, therefore, best suited is between the months of April and July, according to locality.

According to another writer, drying in the sun improves the bark; possibly an alteration may take place such as happens in curing vanilla and tobacco. The inside of the bark is always smooth, taste at first sweetish, then very bitter. On touching either the inside of the bark or the fracture with a drop of solution of ammonia or potash, a deep red colour develops. Winter-gathered bark affords a very faint reddish colour when compared with springgathered bark. A simple test is to take, say, 20 grains of crushed bark and infuse in hot water, with a few drops of ammonia added; then filter and acidify with hydrochloric acid. With a spring-gathered bark there will be an abundant precipitate of resin; with a winter bark no precipitate, or very slight, showing the absence of the resins on which the cathartic action of cascara sagrada is supposed to depend.

[With the foregoing compare articles in our issues of February 16, page 231, and March 23, page 407.— Ed. C. & D.]

Professor Hoffman, of Berlin, has adopted a new method of illustrating the atomic constitution of organic compounds to his class. He uses the ballet. Each girl is dressed in an individual solid colour and represents an atom, and the grouping and movements of the atoms are said to have been very effective. Can we wonder that the chemistry of the carbon compounds has become so popular, that the attendance at the lectures is large, and the interest in the grouping of the atoms is intense?

Legal Reports.

A VITRIOL TRANSACTION.

In the City of London Court last week, the Provisional Registrar (Mr. Chas. Quilter) had before him the case of Wallace v. Bryceson. The plaintiffs, Messrs. H. Wallace & Co., chemical manufacturers, carrying on business at Botolph House, Eastcheap, E.C., sought to recover payment of an account for vitriol supplied to the defendants, Bryceson Bros. (Limited), of Charlton Place, Islington, N. The plaintiffs' clerk said he took an order from a representative of the defendants for a carboy of vitriol, which was duly supplied. The defendants' representative said they had not had the vitriol sned for. They gave an order for it, but it did not come, and they sent their collector to the plaintiffs to state this. The collector had since left their employment. The Registrar said in the absence of the defendants' collector he must find against them. Judgment for the plaintiffs for the amount claimed.

A CHEMIST'S ADVERTISING BILL.

In the Westminster County Court on April 11 the case of Eglington & Co. v. Rackham & Co. was heard by his Honour Deputy-Judge Scott. The plaintiffs, who are proprietors of the paper called Agriculture, sought to recover 5l. 14s. for advertisements inserted for the defendants, a firm of chemists at Norwich. Fourteen shillings was paid into Court, and the defendants contended that the 51. had been paid to the plaintiffs' traveller, a man named Stephenson. For the defence, evidence was called to show that the defendants were called upon by the man Stephenson, and an advertisement was given to him and the sum of 51. was paid to him. They received a notice from the London office of Agriculture that their "special representative" would call in a day or so, and the man Stephenson did call, and represented that the paper had a large circulation, and the advertisement was inserted. The plaintiffs admitted receiving the advertisement, but denied that the man spoken of had any authority to receive money on their behalf. His Honour said he did not believe Stephenson was entitled to receive money on behalf of the plaintiffs. The defendants then contended that in June they countermanded the order when the dispute arose over the payment of the money, but the plaintiffs chose to insert the advertisement after that date. His Honour gave judgment for the plaintiffs for 1l. 16s. in all with costs.

*COLEMAN v. HASSALL.—AN ADVERTISEMENT COMPLAINED

In the Chancery Division of the High Court of Justice, Mr. Ince, Q.C., moved Mr. Justice Kay, on Friday to restrain the publication in The Chemist and Druggist of a certain advertisement. [No particulars were given in court of the nature of the advertisement, or of the article advertised, but we have reason to believe that the one complained of was that which appeared on page xiv (16, bottom folio) of onr issue of April 6.] Mr. Clare, connsel for the defendants, said he was satisfied that the defendants could not resist the injunction that was asked for, and therefore would not oppose it. He was satisfied that the defendant ought to pay the costs. He would therefore submit to a perpetual injunction, and pay the costs of the application. Judgment accordingly.

THE WRITTEN CONTRACT.

In the City of London Court, on Monday, before Mr. O. B. C. Harrison, Deputy-Judge, the case of Jacobs v. Goodwin was heard. The proceedings were brought by Messrs. E. Jacobs & Son, wholesale druggists, carrying on business at 103 Honndsditch, E.C., who songht to recover the sum of 5l. 1s. for veterinary medicines supplied to the order of the defendant, Mr John Goodwin, of Whittlesen, near Peterborough. Mr. E. B. Tattershall appeared for the plaintiffs, and Mr. H. B. Hartley for the defendant.

In opening Mr. Tattershall explained that the defendant gave one of the plaintiffs' agents a written order for the

supply of veterinary medicines on sale or return within six months from the date of the order, which was in May, 1888. The six months had clapsed and the goods were not returned, therefore the action was brought. He produced the order, which the defendant admitted was his.

Mr. Hartley said they did not dispute that the medicines

were delivered.

The defendant stated that in May last year the plaintiffs' agent, Mr. Wigram, called on him and persuaded him to buy the medicines, saying he would call in six months' time and take back those which he had not sold. He told the agent he did not think he would take them, as he did not want to "embangle" himself. The agent said he should have some more if he wanted them. He gave the order after further conversation, but expressly pointed out that the medicines were to be sent at the plaintiffs' own risk, and not his. He said he would not be put to any expense, and the agent replied that they would send them on at once.

Mr. Hartley here raised a question of jurisdiction, saying

the transaction took place at Whittlesea, and not in the

City of London.

Mr. Tattershall said the order was signed by the defendant for delivery of the veterinary medicines to the Great Eastern Railway Company, which was in the City

The defendant swore most emphatically that the instructions to send by the Great Eastern Railway Company were

not filled in by him.

The learned Deputy-Judge said delivery to the Great Eastern Railway Company was equivalent to delivery to the defendant, because as soon as the goods were delivered to the company the defendant was responsible for them, and not the plaintiffs. The court had jurisdiction.

Mr. Hartley said he would now give evidence of what took

place when the order was given; but
The learned Deputy-Judge said that could not be done in the presence of a special contract such as was now produced to him. The object of having it in writing was to prevent prevarication and perjury.

The defendant then went on to state that the plaintiffs' agent, Mr. Wigram, did not call again, as he said he would, or the patent medicines would have been returned. He had

sold but very little.

Mr. Hartley referred to the manner in which the order

had been obtained.

The learned Deputy-Judge said there were many people who went about the country for the purpose of getting orders in a very indirect and improper way, but as far as he could see there was nothing wrong in this case. The defendant should have returned the goods if he could not sell them within the prescribed time.

Mr. Hartley: He said he would come and fetch them. The learned Deputy-Judge: That is not in the contract.

Mr. Hartley: But it is not outside the contract.

The learned Deputy-Judge: If he has acted unguardedly I am sorry for him, but it is a caution generally. He sees the written contract and signs it. No; I must find for the plaintiffs. The defendant must be careful what he is doing

Judgment was accordingly entered for the plaintiffs for 51. 1s., with costs.

A TRAVELLER'S ACTION.

The case of Nobbs v. Lamb came before Mr. O. B. C. Harrison on Mondon in the City of London Court. The plaintiff, Mr. Henry Nobbs, of 115 Caistor Park Road, West Ham, E., brought the action to recover 5l. 18s. 4d. for services rendered to and monies expended on behalf of the defendant, Mr. Charles Lamb, ehemical merchant, of 60 Mark Lane, E.C. The plaintiff was traveller for was due to him. to him. According to the defendant's case the plaintiff and he in October, 1888, entered into an agreement whereby the plaintiff was to obtain orders for the chemicals which the defendant was to execute, the net profit being equally divided between them. The agreement continued in force until the end of November, 1888, when a new agreement was arrived at by the parties by which the defendant was to receive a certain percentage on all goods sold and delivered as his profit on the transactions, the plaintiff to take the balance. According to the defendant's version of the affair

there was an overdrawn balance due to him of 191. 0s. 6d., which amount, with goods alleged to have been supplied to the plaintiff, amounted to 381. 2s. 6d. This was now counterelaimed in a set-off. As the matters in dispute related to the account more particularly, the case was referred to the Registrar under section 92 of the County Courts Act, the question of liability to be discussed hereafter.

BANKRUPTCY REPORTS.

Re BENJAMIN BANKS, Folkestone, Chemist and Druggist.

THE first meeting of creditors under this failure was held on April 13, at the London Bankruptcy Court, before Mr. Worsfold Mowll, the East Kent Official Receiver. The debter, who traded at 11 Sandgate Road, Folkestone, recently filed his own petition, and has furnished accounts showing gross liabilities 2,325*l*. 19s. 9d., of which a sum of 1,254*l.* 8s. 11*d.* is returned as unsecured, and expected to rank against assets valued at 1,199*l.* 15s. 7d., after allowing for payment of preferential claims of 83*l.* 15s. 10*d.* He began business on his own account in 1871 with a borrowed capital of about 2001, and in 1880 made an arrangement with his creditors, under the terms of which he paid 5s. in the pound on debts amounting to about 3501. Although he has sought the protection of the Court, he stated that he did not consider himself to be insolvent, as upwards of three-fourths of his indebtedness was due to his wife for money advanced for the purposes of the business; and he attributed his present position to want of capital, losses by reason of illness, and other causes. The gross takings of the business were stated to be from 1,000l. to 1,050l. per annum during the past three years, and the profits on an average were, for the same period, between 400*l*. and 500*l*. A meeting of the London creditors was held at the Guildhall Tavern on March 8 last, when it was resolved that the estate should be assigned to Mr. John Minter, as trustee, for the benefit of the creditors,

and a deed to that effect was accordingly prepared.

The chairman, having dealt with the proofs tendered, stated that a printed summary of the debtor's statement of affairs bad not been sent to the creditors, owing to the delay in the filing of accounts. He, therefore, explained the position of affairs, and said that, although the estate promised a good dividend by the statement, it was thought the debtor had very much overestimated the assets, and that a much smaller sum would be realised than that estimated by the debtor, who had valued the business as a going concern.

Mr. Minter, the trustee under the deed of assignment, said that all the creditors had assented to the deed, and there had been no necessity for these proceedings, but at the last moment the debtor refused to comply with the terms of the deed. The premises had been held since 1875 under a lease for fourteen years, at a rental of 125l. per annum for the first seven years, and 135*l*. for the remaining term. The landlord now refused to grant a fresh lease, and had stated he did not want to let the premises again to a chemist, and would, moreover, require 1601. a year rent for the future. Under those circumstances, as trustee, he thought it his duty to close the business and sell it as best he could, because it was hopeless to carry it on. The deed of assignment had been prepared in the hope of selling the business as a going concern, when no doubt the creditors would receive 20s. in the pound; but when the debtor was informed of the proposed sale he turned round, refused to go on with the deed, and insisted upon throwing the estate into bankruptey, thinking he would be able to make better terms with the Court than he could under the deed. He had been requested to prepare the statement of affairs, but when he found that the debtor insisted upon putting an absurd value upon the assets he declined to proceed further in the matter. The goodwill valued at 200% by the debtor was really worth nothing, when it was considered that another lease would not be granted by the landlord; the fixtures, fittings, &c., would not fetch more than 50%, although the debtor had returned their value at 350%; the stock, &c., estimated at 500%, would not realise half that sum, as other chemists would not buy the drugs because of a dislike on the part of the general public to be supplied with second-hand goods. The result of the

debtor's action in throwing the matter into the Bankruptcy Court would be that instead of the creditors having a substantial dividend there would be very little for them, and the only thing now to be done was to make the best of a bad bargain, and leave the case in the hands of the Official Receiver to be wound up by the Court as speedily as possible.

The debtor, in extenuation of the action he had taken, said that after the deed of assignment had been prepared things began to go wrong with him, and Mr. Minter and he disagreed upon several matters. When he was informed by Mr. Minter that the lease had been cancelled by the assignment deed, and that the business would have to be sold, he thought that was simply an attempt to frighten him, and then, losing his temper, decided to file his petition, and seek the protection of the Court.

the protection of the Court.

The Chairman: It is a great pity that you thus lost your temper. Mr. Minter, as owner of the estate under the terms of the deed, was entitled to act as he thought best in the interests of ereditors, although I am bound to say that the Court considers bankruptcy proceedings preferable to deeds of assignment. You still have the chance to retain the business by submitting an offer to this meeting.

The debtor said it was not in his power to make any proposal, and he must leave the matter in the hands of the Court. He wished to state, however, that although his wife had a claim for over 800l. against the estate, that claim would not be pressed, as they wished the creditors to receive as much as possible in satisfaction of their debts.

The chairman then intimated that, as there was no offer, it only remained for the creditors to pass a resolution to wind up the estate in bankruptcy, and to appoint a trustee and committee of inspection. With regard to the appointment of trustee, he held proxies from several creditors who were desirous that Mr. Francis Nichols, of 14 Old Jewry, should accept the post. As that gentleman was present, representing some of the largest creditors, he would like to hear his opinion upon the state of affairs.

Mr. Nichols, after looking through the accounts, examined the debtor thereupon, and said he must decline to act as trustee; the post would be most unsatisfactory, owing to the debtor having overestimated the assets, and he was of opinion that the better plan would be to leave the estate in the hands of the Court, to be wound up by the Official Receiver as trustee. From what he could see of the assets, the only valuable items were patent medicines, the cost price of which was 80%, and the good book debts, 66%; therefore but a small dividend would probably result to the creditors.

After some further discussion it was decided to adjourn the meeting until April 18, the chairman in the meantime to apply to the Court for a summary order, so that he could act as trustee in the event of the creditors resolving to administer the estate in that way.

The following are the principal creditors:-

	£	s.	d.
Banks, Mrs., Folkestone	800	11	4
Barron, Squire & Co., Bush Lane, E.C., drnggists	37	8	4
Brooke, J. & W., Folkestone	10	10	10
Dunsford, B.,	16	1	0
Forbes & Co., Gresham Street, E.C., mineral-water mannfacturers	15	0	0
Maw, S., Son & Thompson, Aldersgate Street, E C	55	16	5
Mnsgrave, M., Folkestone	12	3	0
Newbery, F., & Sons, King Edward Street, E.C., patent-medicine			
proprietors	67	17	11
Thompson, Henry A., & Son, 22 Worship Street, Finsbury Sqnare,			
E.C., manufacturing chemists	16	3	3
Weston, Sydney, Folkestone	10	0	0

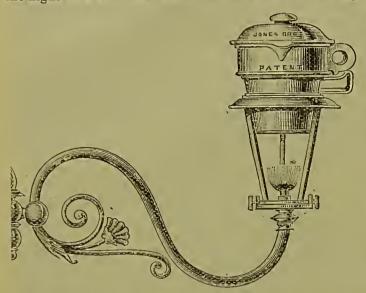
Re ROBERT MITCHESON, Spennymoor, Chemist, &c.

This debtor made an application for his discharge at the Durham Bankruptey Court, before his Honour Judge Meynell, on April 9. The debtor's solicitor pointed out that the estate would realise 18s. in the pound. The Deputy Official Receiver reported that the only charge against the debtor was that he failed to keep books for twelve months prior to bis failure. His Honour said he had the transcript of the debtor's public examination before him, and he found that was the only charge, but thought that he ought to suspend the discharge on that account. He would grant the application, but suspended it for one month.

Notes of Nobelties.

JONES'S "SISTER DORA" FOOD-WARMER.

MESSRS. JONES BROTHERS, of Wolverhampton, have brought under our notice a very neat little apparatus, which we show below, and by which food can be kept warm during the night with the least amount of trouble. The arrange-



ment consists of an earthenware pannikin resting in a hotwater tin, the whole of which is enclosed in a frame which is readily fitted to the gallery of an ordinary gas bracket, so as to dispense with the use of night-lights and oil lamps. A very small jet of gas will keep the food warm all night without trouble or danger, and when it is required to raise the gas nothing need be removed, as the warmer in no way obstructs the light. The illustration shows the food-warmer as it appears when attached to the gas bracket.

SPRULES'S LAVENDER WATER.

MISS SPRULES, of Wallington, Surrey, whose name is well known in the Mitcham district in consequence of the long association of her late father with the special industry of that district, occupies the enforced leisure of the winter in putting up a very fine Mitcham lavender water, which she prepares from the finest Mitcham oil, of her own distillation. Miss Sprules is becoming known at aristocratic fancy fairs and fêtes, and she is acquiring a high-class demand for her product, which, in respect of permanence and fragrance, certainly justifies the higher cost of manufacture involved in the use of the English oil.

ROBINSON'S LIEBIG'S BEEF AND MALT WINE.

We have received from Mr. Benjamin Robinson, of Pendleton, Manchester, samples of Liebig's beef and malt wine made by himself. Mr. Robinson makes two distinct kinds of this wine; one is made with foreign port wine, and requires the wine licence for its sale; the other is made with British port wine, and by permission which the maker has obtained from the Board of Inland Revenue may be sold by those holding a licence for British wines, commonly called a "sweets licence." As the latter licence is only half the price of the former it is one which many chemists might take advantage of. Mr. Robinson's wines appear to be very carefully made. The ports used are first detannated, so that the ruby colour is lost; but there is some certainty that the beef and malt extracts will remain in solution once they are dissolved, and this we find to be the case. The specific gravity of the

foreign wine as medicated is 1.0285, and it contains, we find, fully 10 per cent. of the beef and malt extracts, which yield a copious precipitate on the addition of a little tannin. The wines are otherwise excellent, and of pleasant flavour, and may be obtained in combination with quinine.

PASCALL'S GOLDEN MALTEX.

Mr. James Pascall, manufacturing confectioner, of Blackfriars Road, introduces to chemists a very attractive-looking sweetmeat under the title of Golden Maltex. The tablets are very skilfully manufactured to look like little gilt bags stitched up with red silk, and they are not less attractive in consumption. The pharmaceutical character they possess is imparted by the fact that they contain not less than 25 per cent. of Messrs. Allen & Hanburys' malt extract. Dr. John Tanner considers that they form an excellent substitute for cod-liver oil; that they are an improvement on it in the way of flavour will not be denied by the most frantic lovers of the luscious oil.

TRADE-MARKS APPLIED FOR.

THE Trade Marks Journal publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within two months of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," April 10, 1889.

- "BICEXTINE"; for chemical substances (Class 1). By Paterson's Chemical Manufacturing Company (Limited), 12 Broomielaw, Glasgow. 82,721.
- Picture (Chinese interior); for chemicals (Class 1). By J. Lembke & Co., Shanghai, Hong Kong, and Hamburg, trading also as "The Honest Upright Trading Company." 83,550.
- "AZVALTIK," on label; for an anti-corrosive varnish. By W. Briggs, 3 Springfield Terrace, Arbroath. 84,021.
- "HYPNOFERINE"; for all goods in Class 1. By A. Leonhardt & Co., Muhlheim-in-Hesse. 84,673.
- "MIKADO"; for black japan and other varnishes. By Dockers Bros., Icknield Port Road, Birmingham. 85,258.
- "THE MIKADO MOTH PAPER," with figure of a butterfly on label; for a prepared paper. By Fleming's Oil and Chemical Company (Limited), 101 Leadenhall Street, E.C. 84,859.
- "GIBSON'S COMPOUND LINSEED AND LICORICE COUGH CURE," and other wording on label; for a cough mixture. By J. E. Gibson, chemist and druggist, Reading. 81,650.
- "BALDWIN'S 'MERRYHEART' PILLS," and other wording on round label; for pills. By E. J. R. Baldwin, trading as as "George Baldwin & Son," 7 Deptford Bridge, Greenwich. 84,394.
- Figure of a broom resting on the top of a well; for medicines. By E. W. Brumwell, 7 Lower Terrace, Notting Hill, W. 85,043.
- "THE SOCIETY ABDOMINAL BELT," and figures on label, also a monogram; for instruments, &c., for surgical or curative purposes. By Jackson, Röhrs, & Co., Stockbrook Street Mills, Derby. 83,739-40.
- "Blue-black Stephen's Writing" and "Stephen's Violet-black Copying Ink," in white on black band labels for inks. By H. C. Stephens, Aldersgate Street, E.C. 72,255-6.

- "MYRATUS INK"; for ink. By H. Fitch & Co, 30 Bury Street, E.C. 84,543.
- "BOVININE"; for beef juice. By the J. P. Bush Manufacturing Company (incorporated), Chicago, Ill. 82,570.
- "HEADLAND'S CELERY PEPPER"; for a relish. Ry Headland & Co., 90 Western Road, Brighton. 82,798.
- "TOPAZ SOAP," and device; for common and perfumed soaps. By G. Hearn & Co., Hearn Street, E.C. 83,681-2.

The above issue of the *Trade Marks Journal* contains a notification regarding James Crossley Eno's registered trademarks, No. 13,060 in Class 3, and No. 15,604 in Class 42, each consisting of the words "fruit salt," to the effect that these trade-marks were on March 29, 1889, removed from the register in consequence of the order of the High Court of Justice (Chancery Division).

From the "Trade Marks Journal," April 17, 1889.

- "WOODSTOCK ORIENTAL PERFUMED ENAMEL," and figures on label; for enamel in the nature of paint. By the Belfast Paint and Colour Manufacturing Company, Mount Pottinger. 83,881.
- "FEROZONE"; for precipitants and deodorants. By the International Water and Sewage Purification Company (Limited), 11 Queen Victoria Street, E.C. 84,763.
- "STERILINE"; for chemical substances (Class 2). By Steriline (Limited), 43 Coleman Street, E.C. 85,219.
- "PARABOLIC"; for chemical substances (Class 2). By F. C. Calvert & Co., Bradford. 85,422. Also for perfumery. 85,424.
- "HAY'S SOLUBLE ESSENCES"; for chemical and alcoholic essences. By W. Hay, Hull. 81,694-5.
- "THE 'PERFECTED' MALT AND OIL," and figure of a plough; for a chemical substance. By Allen & Hanburys, Plough Court, Lombard Street, E.C. 83,066. The same for food. 83,067.
- "Robertson's Roseneath Rheumatic Cure," on floral design; for a cure for rheumatism. By J. Robertson, Glenowen, Clynder, Roseneath, Gareloch. 83,810.
- "CREMOLINE"; for chemical substances. By C. Bedford, 6 St. Swithin's Lane, E.C. 85,646.
- "NICHOLSON'S ARTIFICIAL EAR DRUMS"; for the same. By J. H. Nicholson, 21 Bedford Square, W.C. 83,885.
- "STEPHENS' BLUE-BLACK COPYING INK," on label; "H. C. Stephens' Security Ink," and other wording, on label; for ink. By H. C. Stephens, Aldersgate Street. 61,690, 64,836.
- "TOMATO VINEGAR," on figure of tomato; for vinegar. By J. F. Peasgood, Halfway Street, near Eltham. 76,560.
- "Pumiline"; for food. By G. & G. Stern, 11 Billiter Square, E.C. 84,810.
- "CAMWAL"; for mineral and aërated waters. By the Chemists' Mineral and Aërated Waters Association (Limited), 45 Gifford Street, N. 61,567-8.
- Heraldic design, shield and castle (By A. R. Matthews (Limited), Middleton. 85,006); Figure of a bottle (By W. A. Wilkinson, King Street, North Shields. 85,374); "VRIL" (By J. L. Johnston, 30 Farringdon Street, E.C. 85,689); "PEPTAUR" (By Batey & Co. (Limited), 216 Kingsland Road, E. 85,745); all for mineral and aërated waters.
- "FOSTER'S PARAFFIN CREAM"; for a washing preparation. By A. W. Foster, 1 High Street, South Dunstable. 84,675.
- "Nonit"; for perfumery. By Edwin Fowler, chemist, Hull. 80,790.
- "SAVON DE LUXE," and signature; for perfumed soap. By Edward Cook & Co., East London Soap Works, Bow, E. 80,943. "PERFECTED"; for perfumery, &c. By the same. 80,945.
- "Comet," and figure; for perfumery, &c. By J. Crosfield & Sons, Warrington. 819,624.

- Figure of a steam atomiser in use; for a toilet article for the complexion. By G. A. Nunbaum, trading as the Parisian Vaporiser Company, 17 Lancaster Street, Lancaster Gate, W. 82,939.
- "SWEET BRIAR," and signature; for perfumery. By Andrew Brothers, grocers, Oldham. 83,606.
- "VRIL"; for perfumery. By J. L. Johnston, 30 Farringdon Street, E.C. 85,692.

Gazette.

PARTNERSHIPS DISSOLVED.

Freeman, W. G., and Hildyard, G. H., Great Dover Street, manufacturers of baking-powder, biscuits, table-jelly, and pudding-powder, and soap, under the styles of Freeman & Hildyard, and of Apple & Co.

Haller, Geo., & Co. Limc Street, London, E.C., chemical mcrchants.

Ker & de Denne, Hales Owen and Cradley Heath, surgeons.

Kendall & Gill, Bradford, drysalters.

Morrison, W., & Co., Newcastle-on-Tyne, chemical manufacturers.

Newsome & Sykes, Ashton-under-Lyne, mineral-water manufacturers

Pritchard, W., and Jessop, E., East Retford, surgeons, apothecaries, and accoucheurs.

Willoughby Brothers, Spital Square, City, vendors of patent medicines

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Enright, John Anthony (trading as J. A. Enright & Co.), Llanerehymedd, mineral-water manufaetnrer.

Moore, Abraham, Wednesbury, late of Bradley, chemist and druggist.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

- Haffenden, James, Reading, chemist—first meeting, April 25, 119 Victoria Street, Westmiuster; public examination, May 16, Assize Courts, Reading.
- Somerville, Thomas Townsend, Sheffield, surgeon, April 24, Official Receiver's offices, Sheffield; April 25, County Court Hall, Sheffield

ADJUDICATION.

Moore, Abraham, Wednesbury, late of Bradley, chemist and druggist.

NOTICES OF DIVIDENDS.

- Allen, Joseph, Leicester, aërated-water manufaetnrer—first and final dividend of 7s. 3d., any day, Official Receiver's office, Leicester.
- Preston, Henry Horbury, Pendleton, late of Salford, snrgeon—second and final dividend of 2s. 16.7d., any day, Official Receiver's offices, Manchester.
- Wren, Augustus Burney, Manchester, veterinary surgeon—first and final dividend of 20s. and 4 per cent. interest from the date of the receiving order, any day, Official Receiver's offices, Manchester.

APPLICATIONS FOR DEBTORS' DISCHARGE.

- Lake, William Wellington, Walthamstow, surgeon, May 9, High Court of Justice in Bankruptcy.
- Lipscombe, Henry Rogers (lately trading as Lipscombe & Co.), Teddington, late of Oxford Street, now at Queen Victoria Street, and Strand, Middlesex, with Frederick Rogers Lipscombe, as Frederick Lipscombe & Co., filter manufacturer—May 16, High Court of Justice in Bankruptey.

ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

- Irving, Charles, Long Bonnington, snrgeon—Discharge suspended for three mouths.
- Payne, Jacob Hugh, Thrapston, chemist and druggist, and sauce manufacturer.—Discharge suspended until January 1, 1890.

SAFFRON.—Adrian has recently examined a sample of spurious saffron which yielded him over 26 per cent. of ash (true saffron only gives 7:145 per cent.). The ash of the former was composed mainly of carbonate of potash, sulphate of soda, borax, and nitrate of ammonia. The aqueous in fusion was, of course, thoroughly alkaline.

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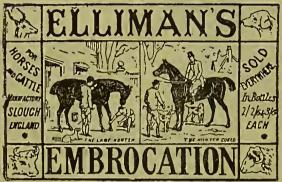
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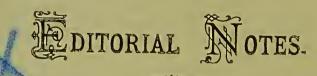
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THE MEDICINE STAMP ACT—WHAT IS WANTED?

OF the various topics which interest ehemists none seems so perennially attractive as the unhappy Medicine Stamp Act of 44 George III. Nor does any rhetoric evoke so much sympathy as a vigorous denunciation of the administration of that Act. Oppressive, iniquitous, illogical, unintelligible, and unjust are the adjectives which decorate the discussion

of the Act and of the authorities at present responsible for its enforcement, whenever it bursts forth in our correspondence columns, or in those of the Pharmaceutical Journal; but with all this indignation in all quarters we do not seem to gct any forwarder. We have yet to ascertain what is the policy which the trade generally would advocate. Is it repeal? This is often enough suggested by individuals, but there is not the smallest indication of anything like a universal desire for the abolition of stamp. We believe the majority of chemists would prefer to retain it. But whether this be the case or not, it must be remembered that even if chemists were united in their demand, and if the Pharmaceutical Council could be induced to act for them, they would have to offer some reasonable reasons to an unsympathetic Chancellor of the Exchequer when they asked him to abandon his grasp on 200,000%. The compiler who should endeavour to formulate a case from the complaints which have been published in the trade organs would soon give up his task as a hopeless one. One man says the tax is an unwise interference with trade, while another finds it specially objectionable on the ground that it encourages a trade which he does not happen to approve of. One class urge the abolition of the tax because, they say, it is a shame to make a sick man's medicine artificially dearer; another set, or it may be the same set, work for the same object on the ground that the Government stamp encourages quackery. Another argument often used, but which it would be hardly possible to seriously advocate, is that an educated body like chemists ought not to be subject to the interference of the Inland Revenue officials; as if nearly every class of persons in a crowded community like ours were not affected by some one or more special Acts.

But it is not, perhaps, so much the repeal of the Act which is demanded, as some undefined modification of it. In regard to this, again, there is scarcely any united opinion, nor is it possible to gather distinctly the exact reformation desired. The Act is an ancient one, and its verbiage is perhaps not so precise as is that of more recent Acts of Parliament; but its obscurities, such as they are, have been made pretty clear in the practice of seventy years, and there are abundant means at all events of getting at the interpretation put upon every line of it by the Board of Inland Revenue itself. Moreover, in cases of doubt the Board will state whether, in their view, a label renders a medicine liable to duty or not. This suffices for the ordinary chemist who carries on his business in order to get a living. If he does not quite agree with the Board's views he does not care to waste his time and temper in disputing with them, and he makes the necessary alteration in his labels, thankful at the same time for the guidance provided in Alpe's "Handy Book." But there are chemists who exert their ingenuity to evade the duty and at the same time to get the benefit which they think it offers; there are others who never read a trade journal, and hear of the Act almost for the first time when they are asked by Somerset House to show cause why they should not pay the same taxes as are imposed on their fellow-tradesmen. It is then that heaven and earth are called to witness the iniquity which prevails in official circles, and the wail arises, What is the good of the Pharmaceutical Council? Far be it from us to defend that body; but there are enough good causes for complaint against it without adding this bad one. The editor of the Society's journal recently told his readers that it was hardly creditable for chemists not to understand the law which affected them so nearly. It may be that with further experience he regards that now as one of the things which had better not have been said; but it was perfectly just. For all practical purposes the law can be understood by any chemist who wants

to understand it, and can be obeyed by anyone without scrious detriment to his business or, as far as we can see, any sacrifice of his self-respect. Reasonable suggestions for the smoother working of the Act have always been considered attentively by the Board of Inland Revenue, and no reader of Mr. Alpe's "Handy Book" can have failed to notice how many concessions to convenience have been made in practice. We would suggest, therefore, to those correspondents who deal with this question in future, that in place of vague denunciations and ineffectual wrath, they should offer (as our readers often do) either contributions of fact from their own experience or correspondence with the Board, or propositions of a reasonable and definite character.

PSYCHO-THERAPEUTICS.

FROM the treatment of disease by means of nauscous medicine, administered in doses which would make the degenerated constitutions of modern days stagger, we have advanced to the elegant pharmacy of tiny tabloids, sugared granules, capsuled fluids. Fifty years ago taking medicine was an attack on a fortress in which some demon had lodged himself, and the process of driving him out naturally and invariably involved the employment of the artillery of pharmacy, and to an extent the damage, if not the destruction, of the fortress itself. Modern medicine does not believe in the demon; unless it be in complaints occasioned by worms and in itch, though bacteriology is getting us round to old doctrines once more. But scientific medicine now regards the smallest trace of an alkaloid capable of influencing the working of some organ of the body, a poison or an antiseptic, in just sufficient quantity to destroy the queen bacilla, if there be such a creature, without damage to the delicate membrane whereou she is breeding, as the extent to which drug treatment should go. Beyond this, though in advance of it chronologically, we have the famous theories of infinitesimal doses and of dynamisation of medical force. But with all the science and skill exhibited in the defence, and in the application of these theories, there is still abundance of room for discoveries of every sort. No system of medicine has yet conclusively established its truth by its success. But we are still advancing. We have progressed from boluses to milligrammes, and from these to infinitesimality. The last was a narrow enough plank to stand upon, but now has arisen a school of practitioners which kicks even that away, and plunges wildly into the abyss of nothingness in the way of treatment. Nothingness, that is, in the materialistic sense; for the power claimed on behalf of the psycho-therapeutists is the most mighty engine within the control of man. In a very interesting little volume by Dr. C. Lloyd Tuckey, entitled, "Psycho-Therapeutics; or, Treatment by Sleep and Suggestion" (published by Baillière, Tindall & Cox), we are introduced to the mysteries of a method of treatment which, according to the author, "has during the last few years attracted much interest among men of science and members of the medical profession on the Continent." This system of treatment, we gather from the book, originated with Dr. Liébault, of Nancy. Dr. Tuckcy tells us it has so far attained its fullest development in Holland, where in every large town it is followed by at least one well-qualified practitioner; while in Germany, Russia, Sweden, and, indeed, every European country, its position is secured by the support of leading physicians, and by the success attending their practice.

Dr. Tuckey is evidently biassed in favour of Dr. Liébault and his treatment, and he does not seem to us to give a properly critical account of what he has learnt; but what we are told is suggestive. The process adopted is simple enough

the patient is hypnotised, and then is told to get better; that is all. That at least is the extent of the system so far as it is special. But it does not appear that this miraculous method of dealing with disease is always to be relied upon. We are told that "although Dr. Liébault rarely gives medicines, but obtains most of his remarkable results by the suggestive treatment pure and simple," his followers by no means dispense with "those remedies which the researches of generations of able men have put within their reach." They appear to combine diet, drugs, electricity, and massage with their hypnotic experiments, and it is not clear how they know which treatment to credit with the resulting cure.

Nor can all sorts of diseases be treated by suggestion. "It cannot restore a joint altered by chronic rheumatism or gout, nor put right an internal displacement, nor can it remove cancer or other malignant disease; neither will it cure paralysis agitans, glaucoma, advanced Bright's disease, or diabetes. Neither can it materially benefit cases of phthisis or organic heart disease, though it may do much to relieve the sufferings incidental to all painful affections. It has been but little employed in acute illness." But it may be employed in rheumatism and gout; chronic constipation and diarrhea will yield to it; "it has occasionally been used in childbirth with beneficial results" [!], and especially in nervous complaints, the "algias," in functional disorders, in dyspepsia, and in the relief of acute pain has it proved of particular value.

Dr. Liébault's dispensary at Nancy is by no means imposing. "The rooms are unpretentious, and even shabby; the patients are ordinary-looking people enough, belonging mostly to the artisan and labouring classes; and the doctor himself, though he has goodness and kindliness written on every feature, is of an unimposing presence."

According to the account given the doctor works his miracles in the most matter-of-fact manner. About two minutes or less suffices to hypnotise the patient. Then if he has headache, for instance, the part where the pain occurs is gently rubbed; he is told the pain is to disappear; he is told to awake; and he does so cured. In ordinary cases the whole process will not have lasted more than five minutes, and the relieved sufferer vacates the armchair in favour of the next in order.

"There is eertainly nothing mysterious in all this," coolly adds Dr. Tuckey. It is only, we understand him to say, the exercise of the power of the mind apart from the will over the body. Nothing mysterious in that! Dr. Tuckey is blasé indeed.

It would be absurd to deny the many wonderful instances on record of strange cures effected apparently by mental processes. Dr. Tuckey alludes to many of these. Still better known are the many cases of disease occasioned apparently by suggestion. The study of a disease has, without doubt, a tendency to induce that disease. There are and have been a percentage of actual cures effected by faith, by the miraculous waters of Lourdes, and by the Royal touch. Can this power of faith, this strange mystic association of the mind and the body, be controlled and directed in the treatment of disease? Dr. Tuckey's treatise goes to prove that it can: the evidence he offers is slender and fragmentary; but it appears to be given in perfect good faith, and as far as it goes is sufficiently marvellous.

THE PROPAGATION OF ECONOMIC PLANTS.

We have to thank Baron Ferdinand von Müller, the well-known Government botanist for Victoria, for a copy of the latest edition of his work on select extra-tropical plants.

The origin of the present bulky handbook, which contains descriptions and commercial information concerning some 3,000 plants of more or less economic value, may be traced back to a few papers on industrial plants available for culture in extra-tropical countries, which appeared in the organ of the Victorian Acclimatisation Society between 1871 and 1878. The success of these papers, and the demand which gradually arose throughout Australia for commercial information about plants which might be eultivated profitably, induced the author to republish these papers in a largely extended and supplemented form for use among Victorian cultivators. Gradually the demand for the volume extended, and an edition appeared specially adapted for British India, followed by one for New South Wales. The work was next translated into German, and subsequently republished in the United States, and the present bulky handbook of over 500 pages, published by the firm of Robert S. Brain, of Melbourne, is the latest of the scries, though in all probability it will ere long have to be supplemented afresh. This contingency, we may add, the author foresees, for he expressly points out how the increasing facilities for communication with the less explored parts of the globe continually place us in possession of entirely new or hitherto neglected plants, which are destined before long to find a place in the arts or manufactures, and he expresses his willingness, as occasion arises, to add fresh information to that which he gives in the present volume. Although Professor von Müller's book is entirely commercial in its scope, the plants mentioned in it are arranged alphabetically according to their botanieal names; but as an index to the vernacular names of the most important of them is added, this arrangement can offer no great difficulty to the cultivator, while it greatly increases the simplicity of the work. Of the acacias, for instance, no less than 47, and of the eucalypts 68 species are described in the book, some of them at considerable length; and if these had all been arranged according to their popular names immense confusion would have resulted. For the rest, the book is compiled on the same principle, and it is meant to appeal to the same elass of readers as Semlers's "Tropische Agricultur"; but it treats of a great many more plants than the latter, though in a much more condensed form. Australian plants are, of course, dealt with very exhaustively, especially the Australian wattles and the eucalypts. The wattle-acacia appears to offer considerable advantages for economic cultivation. Any bare, sterile, unutilised place may be remuneratively sown with it, and a return can be expected in from five to ten years' time. Full-grown trees yield as much as 1 cwt. of bark, and one gigantic tree at Southport yielded 10 cwts. The bark sells in Melbourne at from 5s. to 8s. per cwt. Cutch -from acacia catechu—might also perhaps be profitably produced in Australia. For such articles there is a very large and growing consumption, and the trees which produce them are essentially those suited for a country like Australia, where most cultivations are on a large scale. But a number of other plants are mentioned by Baron von Müller, and of some the cultivation is expressly recommended, which would, we think, if propagated at the present time, only bring disappointment and loss to the growers. Most of the essentialoil plants belong to this class. The markets of the world are flooded with their produce, and to increase the production still further would simply mean a prolongation of the period of unremunerative prices to growers and dealers. It is intcresting to read that experience has shown that peppermint can be successfully grown at Port Philip, yielding from 5 lbs. to 7 lbs. of oil per ton of cut herb; but we would strongly counsel Australians not to commence the cultivation of the plant on any large scale, as their own markets could probably not absorb all they would produce, and there is no

room for an export trade in the article. Jalap might be grown successfully in Australia, but we very much question whether its cultivation would pay, while to take up the culture of indigo would certainly not be advisable just now. On the other hand the camphor laurel is a tree to which planters in search of a new thing, and desirous of leaving a tolerably safe investment to the succeeding generation, might well pay some attention. Ipecacuanha, and a few other drugs, for the supply of which we are now dependent exclusively upon semi-barbarous countries, might also be tried. If any cultivation is overdone it is that of cinchona, and we regret that Baron von Müller should inadvertently have stated that the price of succirubra bark varies in Europe from 2s. to 9s. per lb. according to quality.

The author in his preface has a sly hit at the numerous class of persons who have made use of previous editions of his book, "with intentional evasion of all literary or other acknowledgment." It is undoubtedly very wrong thus to make use of information collected by another, and we sincerely trust that in the many succeeding editions of his valuable work which still repose in the lap of Time the author will repair the accidental omission of the name of The Chemist and Druggist from the list of journals whose pages have afforded data for the compilation of his book.

Sandal-wood Oil. Circular regarding sandal-wood oil, point out that the U.S. Pharmacopæia gives its specific gravity as about 0.945; but they find the bulked result of a distillation to be 0.970 at 60° F. The first of the run was of light colour, and weighed 0.960 at 60° F., and on account of its flowery odour was specially adapted for the finer uses in perfumery; while the last of the run was darker, weighed 0.980 at 60° F., and had an intensely strong pungent odour. They are satisfied that for many years this oil, in a pure state, was practically unknown in the American market. They adulterated a sample to the extent of 20 per cent. and submitted it along with a sample of the original pure oil to ten experts on essential oils generally, nine of whom selected the mixture as the better. It would be interesting to have the experience of English distillers on this point. There is no doubt that the U.S.P.'s specific gravity is much too low—indeed, it is not possible to get a pure oil lighter than 0.970.

Attenuated Specific Organisms. Government Board there is an interesting series of observations on the disinfecting power of perchloride of mercury on anthrax bacillus by Dr. Klein, this being a continuation of last year's investigation on the "attenuating" influence of the perchloride. Dr. Klein has now obtained such a degree of attenuation that a subculture of the anthrax may be inoculated even into guinea-pigs without fatal result; the inoculation affording them for a time a measure of protection against more virulent subcultures of the same material. This special attenuation of the anthrax bacillus is obtained by growing them in gelatine medicated with perchloride of mercury. This investigation has a two-fold importance—one as suggesting lines on which to proceed for the attainment of fresh means of security against fatal attacks of infectious disease; the other as leading to a better understanding of the natural history of bacteria, and of the profounder meaning of what we now speak of as specific infections.

Le Caron. Our contemporaries in the Far West are determined not to let Dr. Le Caron alone. A Chicago journal has spoken strongly of his sins, and now a St. Louis organ comes out with a pungency which would lead us to suppose that he was one of the lowest instead of one of the well-respected pharmaeists of the States. The National Druggist tells us that "the coming annual meetings of the American Pharmaceutical Association, and of at least two State associations, will be enlivened by the unusual cere-

mony of expulsion of a member for 'conduct derogatory to a man and a pharmacist,' or some such declaration. The same individual will figure as the expelled in each instance. We allude, it is scarcely necessary to say, to Le Caron, alias Beach, the perjured State witness." Our contemporary's zeal exceeds his discretion. It has certainly not yet been proved that Le Caron is a perjured witness, and it must not be forgotten that the main part of his evidence is quite independent of the issue of the trial. The St. Louis writer says, "Of course the associations mentioned cannot hesitate as to the manner of 'firing' him, and we are quite sure that we know a few members thereof who would enjoy the opportunity of applying the 'fire' in the shape of a red-hot branding-iron. However, their tongues will blister him almost as badly as the latter would have done." If Le Caron's evidence has shown anything at all it is the unbridled spitefulness of some of the exponents of American pharmacy. Before the members of the American Pharmaceutical Association journey to San Francisco to expunge Le Caron's name from the roll they had better see if it is there; we cannot find it.

CHEMICAL CHARACTERISTICS OF OLEUM PINI PUMILIONIS.

DR. HAGAR states in his "Pharmaceutische Praxis" that this oil should have a specific gravity of 0.865, should boil at 170° C., should dissolve in from 12 to 15 parts of 90 per cent. alcohol, and should be levogyre. Dr. Schweissinger has examined samples of Hansel's oils (*Pharm. Centralhalle*). The pumilio oil of commerce contains, as a rule, different terpenes; one of these, a low-boiling terpene, is contained in the purified oil. It is worthy of note that all the fractions of different boiling-points were levogyre, while the closely corresponding and almost identical oils of fir-cone and pinecone are retrogyre.

cone are retrogyre.

Oleum Pini Pumilionis.—Specific gravity at 15° C., 0.8695; specific rotatory power —21° (for 100 min. Schmidt and Hänsch); the principal portion distils between 180° and 240° C. It is slightly soluble in 90 per cent. alcohol, one part dissolving incompletely in 10 parts of the spirit; but it is perfectly miscible with all proportions of absolute alcohol.

is perfectly miscible with all proportions of absolute alcohol. Reactions.—With metallic sodium it feebly reacts on heating, and boiled with solution of soda a brown colour is produced. Iodine gives no reaction in the cold, but on heating a slightly yellow colour is produced. A drop of the oil dissolved in a few drops of glacial acetic acid gives, on the addition of a drop of sulphuric acid, a yellow colour, with erimson streaks.

Terpene ex Oleo Pini Pumilionis.—Sp. gr. at 15° C. 0.8538. Sp. rot. power —10°. Boiling-point about 160–170° C., and should not exceed 9.5 per cent. at 140°–160°; 78 per cent. at 160°–170°, and 11.7 per cent. at a higher temperature. Dissolves in 12 parts of 90 per cent. alcohol nearly, and is miscible with all proportions of absolute alcohol.

miscible with all proportions of absolute alcohol.

Reactions.—It does not react with sodium nor solution of soda. The reaction with iodine is feeble; with glacial acetic and concentrated sulphuric acid it gives a beautiful erimson colour. This reaction for the different terpenes, especially those which are retrogyre, we owe to Wallach.

Olcum Pini Pumilionis sinc Terpenc.—Sp. gr. at 15° C., 0.9308; sp. rot. power, —45. The boiling-point lies between 210°-230° and 230°-255°. The oil should not yield over 13 per cent. at 190°-210°, 30 per cent. at 210°-230°, 41 per cent. at 230°-255°, and the remaining 10 per cent. at 265°-275°. It is incompletely soluble in 15 parts of 90 per cent. alcohol, and is miscible in all proportions with absolute alcohol. It is readily acted upon by sodium in the cold, becoming of a brown colour on heating, and a similar reaction is obtained with solution of soda. With iodiue there is no reaction in the cold, but a yellow colour on heating. The colour produced by sulphuric acid in the acetic acid solution is yellow.

THE annual general meeting of the Chemists' Assistants' Association will be held on May 2, when the Chemists' Assistants' Association prize essay will be read by the successful candidate.

Notes on Books.

A VERY valuable book is now being published in four volumes by Thos. Sealey, Clark & Co., of London, and D. Appleton & Co., of New York. It is entitled "An Illustrated Encyclopædic Medical Dictionary: being a Dictionary of the Technical Terms used by writers on Medicine and the Collateral Sciences in the Latin, English, French, and German Languages." Dr. Frank P. Foster, of the New York Medical Journal, is the editor, and he has the assistance of a score of American medical men in its compilation. The first volume of the dictionary has been published, and when the other three are out it will be the most complete work of the kind in the English language.

We seem to have to go to the United States for these colossal works of reference; probably because the American mind ean assimilate knowledge better from heavy tomes than from neat handbooks. With Englishmen it is otherwise; indeed, had it not been for the American orders (which amounted to nearly three-fourths of the whole edition) the "Eneyelopædia Britannica" just eompleted would have been a financial failure. We had a proof some time ago of this national trait in the receipt of the first year's instalment (five large 8vo volumes) of the "Annual of the Universal Medical Sciences." The object of this work is to collate the progressive features of medical literature at large, and clinical data from countries in which no literature exists-wherever that may be, Kamskatchka probably—and to present the whole once a year in continued form. Dr. Charles E. Sajous, of Jefferson Medical College, Philadelphia, is the editor of this annual, and we count 75 associate editors, 24 collaborators to the dental department, and 133 corresponding editors, the latter comprising some of the best medical authorities in the old world. Those residing in England are Dr. Fancourt Barnes, Mr. Brudenell Carter, the late Dr. Milner Fothergill, Mr. Lawson Tait, Dr. Hack Tuke, Dr. George Wilson (Leamington), and Dr. Edward Woakes. The work is exceedingly well done both in the editorial and publishing departments, and we hope that Mr. F. A. Davis, of Philadelphia, the publisher, will have such support as will eneourage him to go on with it.

Another American book lies on our library table—the 36th volume of the "Proceedings of the American Pharmaceutical Association," made bulkier this year by nigh 200 pages, owing to the inclusion of the National Formulary. The American "Year-book" is superior to our own in some respects, perhaps in nothing more than in the prominence which is given to pharmacy. The "report on the progress of pharmacy" is, it is true, somewhat comprehensive, for here we find everything, from the composition of Pasta Mack to Dichinolindimethylsulphate; but the editor succeeds in arranging the extremely varied paragraphs in a truly scientific fashion, and the work, as a whole, is a fair and succinct record of 1887 pharmacy.

Dr. Charles Rice, the chairman of the committee for revising the United States Pharmaeopœia, deserves high praise for his "Digest of Criticisms" on that work. Part I. of this is a pamphlet of 189 large octavo pages, and is a veritable mine of references to the pharmaceutical literature of the past five years.

The Westminster College of Pharmaey series of hand-books receives a useful addition in "Wills' Guide to Prescription Reading" (1s. 6d.) Although a tiny booklet of sixty-two pages, and just the size for the breast poeket, the guide is certain to be useful to many a Minor student. It

contains a highly condensed Latin grammar, with medical Latin examples, a vocabulary, list of abbreviated phrases, a number of well-chosen abbreviated prescriptions (with full Latin renderings), and some other useful information. It is put forward as being "especially useful to students preparing for the Pharmaceutical Minor Examination," a statement which we can confirm.

Two other students' books come to us from Mr. J. H. Allan, of the Liverpool Royal Infirmary. One is a "Table of Doses" (B.P. 1885) published at 6d. by Bailliere, Tindall & Co. It is sufficiently compact to go into the vest pocket. The other compilation is a "Table of Official Preparations" as required of candidates for the first examination for the double qualification of the London Colleges of Physicians and Surgeons. The information is conveniently arranged and suitable for the purpose; but there are several slips, such as the omission of the spirit from the "composition" of liq. strychninæ hydroehlor., the placing of oleum phosphoratum under oleata, and so on. The occurrence of "acetum cantharides" twice in a short prefatory note recalls to mind the common use of the plural of cantharis in all our English renderings of the Latin singular term. How has this anomaly arisen, we wonder? The Germans use the Latin plural-emplastrum cantharidum and tinctura cantharidum.

A pamphlet in the form of a map of the country neatly printed in colours on stout paper, and accompanied by a good deal of statistical and other information, has been issued from the office of the London Consul of the Republic of Uruguay in South America. The pamphlet is evidently "got up" with a purpose, and the rose-coloured view taken in it of the moral and material progress of Uruguay in 1888 should not delude those who may feel interested in that Republic and its future into the belief that there is no reverse to the pieture. But for firms engaged in business with this part of South America and others the pamphlet is well worth acquiring, as it gives, besides a well-executed map, a considerable amount of information on commercial and other matters. The pamphlet, it would seem, may be had gratuitously from the Uruguayan Consulate, 27 Throgmorton Street, E.C.

ARROW-POISON. — Most of the arrow-poisons of Africa hitherto known have been of vegetable origin; indeed, all the famous poisons are of this nature. Mr. H. M. Stanley has added one poison to the list which does not appear to be a product of the vegetable kingdom. In the Lower Congo district Mr. Stanley's force was assailed by a tribe of dwarfs, who used poisoned arrows. Five members of the expedition were hit by these arrows, four (black men) dying very shortly after, their sufferings having been intense. The fifth man—Lieut. Stairs—had a narrow escape. The poison of the arrow which hit him had been dey, and so he did not experience the full toxicity of the barb. It was afterwards found that the poison is manufactured from the dried bodies of red ants, or pismires, ground into powder, cooked in palm oil, and smeared over the wooden points of the arrows. What is the nature of the poison which causes death? The Lancet says it is formic acid, which exists in the free state in red ants, and is, in the pure state, so corrosive that it produces blisters on the skin; hence there is little ground, says our contemporary, for doubting that it was the "deadly irritant by which so many men had been lost with such terrible suffering." The multitude of curious insects encountered, which rendered their lives "as miserable as they could well be," bears out Mr. Stanley's idea that many similar poisons could be prepared from insects. It certainly is strange that, with the exception of cantharides, and perhaps of blatta orientalis, the insect world is so little used for active therapeuties. Not forgetting the fact that homeopaths have long had that respect for the insect kingdom which the Lancet desires, we may mention that ptomaines as a source of toxicity are more likely than formic acid to have produced the paralytic symptoms which were exhibited by the dying men.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., April 17.

THE markets are wearing their accustomed Easter-holiday aspect, and business is now virtually closed. There has not been much doing privately, and the alterations in prices are few, and mainly confined to drysalteries. Camphor is very steady, with good sales in crude. Ipecacuanha is also selling regularly at the last quotation. Shellac is a turn higher just now. Vanilla tends higher, and in opium somewhat more business has been done. Podophyllin, veratrine, cocaine, tartaric acid, cream of tartar, and chlorate of potash are all firmer. Quinine has well maintained its position. Turkey sorts gum arabic are still creeping up. Petroleum and cut Cochin ginger dearer. Lower prices rule for glycerine, cloves, black and white pepper, cotton, linseed, and rape oils, turpentine, block gambier, and certain ordinary varieties of tea.

Some commotion was caused in the Commercial Sale Rooms late on Tuesday evening by the appearance there of an old and highly-respected Mincing Lane broker, who energetically complained to a sympathetic audience, mostly composed of coffee operators, of having been "let in" by one of the well-known frequenters of the shellac "ring." It is whispered that the latter gentleman, whose absence at the drysaltery auctions on Tuesday caused some remark, and who has not since been seen about in the Lane, has "shot the moon," and the grievance of the complaining broker was that on Saturday, after banking time, he received from the absent "ringist" a cheque for 871 in payment of goods, which cheque had been dishonoured upon presentation. The old gentleman felt his trouble very acutely, and was figuring out that he would have to turn over about 17,000%. worth of orders before he had made good his loss—if loss it should prove to be. He ascribed the *contretemps* to the immoral system of gambling now prevailing in shellac, and roundly denounced the "ring" to the circle of his hearers as not squaring with honest business princip'es. Finally the disappointed gentleman went up to the leader of the "ring," who happened to be standing by, and recapitulated his opinions to him, but only received a sneering advice to go away. Today's "ring" was unusually crowded, in the expectation of a scene, it having been rumoured that the old broker intended to make a dramatic appeal to his younger and more inex-perienced brethren. But no such occurrence took place, and after a few calls for the gentleman, "business" proceeded as usual in the great Tay-kin.

The Sugar Market has been in a very electric state for some time, and early last week additional activity was imparted to it by the intelligence that out of an estimated production of 980,000 tons of beetroot sugar in Germany, only 150,000 tons remain for export between now and August. On Friday last the introduction of the Sugar Bounty Bill, and the speech made on that occasion by the Under-Secretary of State for the Colonies, forecasting a great scarcity of sugar during the coming summer, further affected the market. America has sent over very large orders for beet sugar to Germany, and the speculation appears, in fact, to owe much of its strength to operators on that side of the water. On the Clyde there is great excitement both in raw and crushed sugar, and a further rise is generally anticipated. The speculative business has greatly benefited the London Produce Clearing House. Beet 88 pcr cent. has risen between Thursday last and to-night from 17s. 6d. to 21s. 6d. for April.

TRYING TO EXTEND AMERICAN COMMERCE.—A conference of American nations will be held in Washington in

October next, at which delegates will be present from nearly all the American Republics and also from Brazil. The conference is to be held chiefly for the purpose of considering questions relating to the improvement of business intercourse and means of direct communication between the countries of America, and to encourage reciprocal commercial relations. A Spanish-American Commercial Union has just been organised in New York for the purpose of promoting the trade with Mexico, Central and South America, the West Indies, and the Philippine Islands. At present only about 11 per cent. of the total imports of these countries come from the United States.

At the shellac auctions on Tuesday the noisy section had the upper hand, and improved the occasion by every few minutes impeding business by stamping, whistling, and other noises. During the din Mr. Henry B. Hart was heard to propose some resolution with regard to the alteration of the "prompt" day for parcels that would fall due on one of the coming holidays; but he found no seconder, and finally stood down, the meeting not being in a mood to listento him.

THERE is a project to establish a new steamship line between Bremen and the West Indies, principally with a view to extend the large rice and tobacco trade of the German city. In tobacco Bremen is the principal market of the world, and it is claimed that nearly as much rice is hulled there as in London and Liverpool together.

THE CAUSTIC SODA ASSOCIATION recently met to discuss the position of the article, but failed to arrive at a definite result. It is thought that the association may not continue to exist much longer.

THE EXECUTIVE OF THE BLEACHING POWDER ASSOCIATION have issued a circular recommending a reduction of 25 per cent. in the decomposition of salt. This would leave each works perfect liberty of action in the disposal of its products. Either bleach, chlorate, or hydrochloric acid could then be sold according to circumstances, and the saltcake either sold or worked up as at present. The proposal is postponed for future discussion.

QUICKSILVER MINING IN MEXICO.—Under a recent law the production of quicksilver, as well as of coals and iron, in which the Mexican Republic is known to be very rich, has been rendered completely free from all dues with the exception of a general tax. Up to the present, however, this concession does not appear to have stimulated mining operations to any large extent. The northern part of Mexico contains numerous important quicksilver deposits, and yet all the mercury used in the gold and silver mining industries of the country is at present imported from California. The bulk of the Mexican quicksilver ore occurs as cinnabar, in some parts also in combination with antimony-for instance, at the Huitzuco works in the State of Guerrero. Mexican ore is said to be exceptionally rich, yielding somctimes as much as 30 to 35 per cent. (?) of mercury, while the Californian usually only contains 1 per cent., and seldom reaches beyond 7 per cent. The annual consumption of quicksilver in Mexico is estimated at 20,000 bottles, and owing to the primitive manner in which the silver mines are exploited, the loss of the metal in the treatment of silver orc is no less than 2 lbs. per ton of ore. The original price of the metal is almost doubled by the high cost of carriage from San Francisco, the bottles having to be carried part of the way by mules, three flasks being a load for an animal.

AN ALTERATION IN THE GUM SALES was proposed at the last auctions, and carried unanimously, by virtue of which there will in future be a sale of varnish-gums and one of water-gums every alternate fortnight. Hitherto both varnish and water gums have been sold at the same auctions, the former class being gone through in the morning and the latter in the afternoon; but so large have been the quantities offered lately (especially of Indian gum arabics) that purchasers have found it impossible to properly inspect the samples.

ACIDS.—Citric remains very dull and quiet, with sellers at 1s. $4\frac{1}{2}d$. per lb. on the spot, and 1s. 5d. per lb. for forward delivery. Oxalic dull at $4\frac{1}{2}d$. per lb. In Tartaric a decidedly better tone prevailed, and prices are about $\frac{1}{4}d$. higher, foreign having sold at 1s. 3d. per lb. for May-delivery. For English 1s. $3\frac{1}{4}d$. to 1s. $3\frac{1}{2}d$. per lb. is wanted.

ANISE.—Genuine star-anise is offered by cable from China at 87s. per cwt. "c.i.f." terms to-day.

ARSENIC.—White powder remains firm at 13s. to 13s. 3d. per ewt. landed.

CAMPHOR.—Business is stated to have taken place in Japan a few days ago at 86s. 6d. "c.i.f." Hâvre terms for 200 piculs for arrival. On the spot a sale of 100 tubs Japan is reported to have been made early this week at 92s. 6d. reweight. Since then the market has kept very firm, with further sales at the same figure, totalling up to 250 tubs.

CARAWAY SEED.—Seventy bags small grained *Dutch* seed were sold to-day without reserve at 24s. to 24s. 6d. per ewt.

CASCARA SAGRADA.—Prices are more or less nominal at present in the absence of business. High rates are still quoted on the spot, but for forward delivery lower prices are quoted in some quarters. There is a certain amount of anxiety as to the safety of the ship *Hospodar*, which left San Francisco for London on November 24, carrying, it is said, about 2,000 lbs. of cascara, and of which no news has since been received.

COCAINE is again quoted higher, 15s. to 15s. 6d. per oz. being asked for German in bulk, and the agents who quote the former price say that they would not care to fill any large orders at the quotation.

COCHINEAL dull at 1s. 1d. to 1s. 4d. per lb. for silver, and 11d. to 1s. 3d. per lb. for black *Teneriffe*, according to quality.

COD-LIVER OIL.—The Finmarken fishing has now commenced, but there is no news yet of its result up to the present. The Lofoden fishing has closed. Prices are unchanged from 80s. c.i.f. terms.

CREAM OF TARTAR has increased in firmness this week. At present 93s. 6d. might still buy, but some holders want 94s., or even 95s., per cwb. for white crystals.

CUTCH.—The market remains quiet, with small sales privately at about the following rates:—Double Eagle, 29s.; Ilag BB, 29s.; Star B, 28s. 6d.; MM in tablets, 27s. 6d.; Pagoda in block, 23s. 6d. per cwt.

GALLS.—Of *China* 100 cases April-May shipment are reported sold at 55s. 9d. per ewt. c.i.f. Hamburg, while good *Japan* galls are selling on the spot at 62s. per cwt.

GAMBIER.—For arrival business has been done this week, it is noted, as follows:—February-March shipment, 26s. to 26s. $1\frac{1}{2}d$., and March-April at 26s. per cwt., holders being firm. An unusually large quantity both of block and cube gambier was catalogued for sale. Of the former, 426 bales, re-weights, all faults, sold without reserve at 25s. 9d.; a few at 26s. per cwt. The cubes were partly reported sold before the auctions. An offer of 43s. 6d. per cwt. was refused for good finger gambier. Block sold to-day for arrival, April-May shipment, at 25s. 6d., which is lower.

GLYCERINE.—Some of the German agents still quote the same prices nominally, but others say that they would take lower prices, and it is said that one man even offers at 62*l*. per ton for double-distilled s.g. 1.260.

GUM ARABIC.—The following are the current quotations for some of the principal East Indian and African gums:—

Aden, bright bold ambery to small siftings, olibanumscented, 30s. to 48s. per ewt.; dark common to good red pickings, 13s. to 31s.; medium dusty palish but slightly clinkery
sorts, 45s. to 50s. Amrad, soft pale and amber Kurrachee
drop, 90s. to 95s.; yellow Cawnpore drop, 58s.; good red
pickings, 35s.; elean amber and red insoluble Bussorah
drop, 13s.; small yellow to reddish dusty Egyptian drop,
50s. to 56s.; yellow to good palish Amrad drop, 35s. 6d. to
52s. per ewt. Australian gum has been bought pretty freely
at good prices, viz., 32s. 6d. to 45s. for dark and woody to
good red sorts. From Tricste we hear that purchases have

been made there of Turkey sorts for American account, which have strengthened the market still further.

HONEY.—Another shipment of 297 cases Chilian honey arrived this week from Valparaiso. In Liverpool there is a steady demand for this variety at from 28s. 6d. for Pile III. to 33s, per ewt. for Pile I.

INSECT-FLOWERS.—Business has been very quiet, and since the recent drop the article has undergone no further change.

IPECACUANHA.—It is said that there is a steady sale by private contract at 7s. 6d. per lb. for fair quality.

Nux Vomica.—We have received 667 packages from Bombay this week.

OIL (CASTOR).—The market in London remains very firm. Calcutta advices dated March 26 state that there has been a large business at unchanged rates for shipment to the United Kingdom, Australia, and the far East.

OILS (ESSENTIAL).—Star anise—Mail reports from Hong Kong speak of fresh supplies as having arrived. The article was freely offered with a lower tendency. On the spot there is a small business at 5s. 11d. per lb. Cassia oil—When the last mail left Hong Kong there were orders in that market for the States, but these could not be executed for want of stock. In London holders are a little less pretentious now, and spot sales are being made at 3s. 4d. per lb. We have received a consignment of 121 eases Lemongrass oil from Cochin this week. In French and Italian essential oils there is no change this week. Peppermint very dull, and lower for American. H.G.H. may be had on the spot at 13s. per lb.

OILS (VARIOUS).—Cocoanut steady, but quiet at 25l. 10s. to 26l. for Ceylon, according to packing. Cochin oil, spot, 27l. to 28l., with rather better demand. Distant shipment offers at 25l. 5s. "c.i.f." Mauritius nominal at 26l. Cotton-seed oil has slightly declined, spot being obtainable now at 22l. 5s. for crude, and 24l. 5s. to 25l. 5s. for refined. Hull crude, 21l. to 21l. 2s. 6d.; refined naked, spot, 22l. 7s. 6d. to 22l. 10s. Linseed oil slightly lower in London, and not much inquired for; 18l. 10s. to 18l. 15s. is the quotation. Hull naked, 18l. 2s. 6d. Olive oil keeps pretty steady, but the demand is very limited. Mogadore, 31l. 10s.; Spanish and Sicilian, 34l. to 35l. The Naples market is very inactive, and prospects for the coming crop are said to be good. Palm oil unchanged at 25l. for fine Lagos. Petroleum has improved on the spot, and still more so for forward delivery, especially towards the winter, and dealers are not anxious to close even at the enhanced rates. American spot, $5\frac{1}{3}d$. to $5\frac{1}{16}d$.; waterwhite, $8\frac{1}{2}d$. to $9\frac{1}{2}d$.; cases, 7d. to 10d.; April, $5\frac{1}{3}d$.; Sept.-Dec., $6\frac{1}{6}d$. to $6\frac{1}{4}d$. Russian spot, $5\frac{1}{3}d$. to $5\frac{1}{4}d$.; Sept.-Dec., $5\frac{5}{3}d$. Rapesced oil much lower, and closing dull for brown on the spot, 25l. 10s. Refined also easier at 27l. 10s. Turpentine lower on the spot, but fairly steady forward. American spirits, spot, 33s. 9d.; April and May, 33s. 6d.; June, 30s. 6d.; Sept.-Dec., 28s. 3d.

OPIUM.—There has been a better retail inquiry in London this week for *Druggists*' opium. Fine qualities are quoted at 9s. 6d. per lb. lowest, though holders generally ask 10s. per lb. Seconds are worth 8s. to 8s. 6d. per lb. In *Shipping* opium there has been very little change, and hardly any business is doing in this variety. *Persian* quiet at 12s. to 12s. 6d. per lb. From Smyrna there is no news, but it is thought that the view there prevails that the article has touched bottom, and that the low prices will bring in speculators.

PODOPHYLLIN.—The resin is still advancing, owing to increasing scarcity of the root, and is now quoted at 10s. per lb.

Potash (Chlorate) is better inquired for, $4\frac{3}{4}d$, per lb. being now asked on the spot.

QUICKSILVER.—The importers' quotation for the metal has remained steady this week at 8*l*. per bottle; second-hand holders have fluctuated from 7*l*. 19*s*. to 7*l*. 17*s*. 6*d*., elosing at the latter price.

QUININE.—Prices have remained steady this week, though without much alteration. Yesterday a sale of 40,000 oz. B. § S. quinine in first hands, November-December delivery, at 1s. $2\frac{1}{4}d$. per oz. was reported, and on the spot 1s. $1\frac{1}{2}d$. per oz.

has been paid for second-hand stuff. To-day the agents report a further sale of 10,000 oz. at the same price, and more business is pending. The lots are said to have been bought by three different operators. 10,000 oz. Brunswick, June, also sold at 1s. 2\frac{1}{4}d. per oz. Howard's brand is held at 1s. 5d. in bulk and 1s. 6\frac{1}{2}d. in bottles, and Pelletier's at 1s. 6\frac{1}{2}d. in bottles. Aucrbach ask 1s. 2d. spot, Italian also 1s. 2d. per oz. With regard to the new process of manufacturing quinine in India by the cold-oil process, recently described in this journal, Messrs. Böhringer & Sons point out that, while the Indian Government intend to sell 80,000 oz. annually of this quinine at 1s. 9d. per oz., they might have bought this quantity in London at any time this year at say 1s. 4d. per oz, all packages free, delivered in India, which would have meant a saving of at least 1,667l., while now the English merchants and manufacturers who have hitherto supplied most of the quinine for the Indian market will find this outlet closed against them.

SAFFRON.—Our Valencia correspondent writes:—There has been a very lively demand for this drug here during the last two months. Sales of great importance have taken place, and prices have risen in consequence. The stocks now are greatly reduced; in fact, they never were so small at this remote period from the new crop, which is still 'six months off. There are about 10,000 lbs. in all in Valencia, and it is estimated that there are also about 6,000 lbs. to 8,000 lbs. left in the interior. This, however, is a mere conjecture, and can never be indicated with accuracy, as the peasants are often hiding their goods, in hopes of better prices. The sudden and enormous rise in the value of this article this year has quite turned their heads, and their greed for larger profits can never be satisfied. However, information from various—and, above all, trustworthy—quarters confirms the scarcity of saffron in the interior, and still higher prices may therefore be anticipated during the coming summer.

SHELLAC.—The speculative market at the end of last week closed very dull and lower, with sales for delivery, TN Orange, May, 68s.; June and July, 60s.; August, 69s. 6d. per cwt. On Monday, however, there was a sudden improvement, and prices for second orange in the Ring were for 2s. to 3s. higher, with a fair amount of business on paper. At Tuesday's auctions a moderately good supply was offered for sale, embracing a fair assortment of orange and garnet, but no fine button lac at all. The catalogues mentioned:

		Cases	C	ases	
Orange lac.:	-	518	of which	428	were sold.
Garnet "	••	165	"	50	29
Button "	••	140	29	-	93
Total		823		478	

There was a very good demand throughout the sales, and, with frequently brisk competition, prices advanced from 2s. to 4s. on orange and 1s. on garnet lac, as compared with the previous week's auction rates. Several holders showed no anxiety whatever to realise even at this advance, or the whole quantity catalogued might have easily been disposed of. The following prices were realised:—Second orange, fine bright pale, 74s., rising to 77s.; good bright reddish, 69s. to 70s., a few lots rising to 71s.; good pale orange but cakey and out of condition, 68s.; good bright orange, 69s. refused, 71s. being the limit named; good bold reddish native, 64s. to 65s.; ordinary dull and dark, 60s. to 64s., mostly 63s. per cwt. Garnet lac, good free AC, 56s., one lot 57s.; out of condition, 53s.; block, 51s.; slightly cakey, 53s., rising to 55s.

At the call after the auctions, business was done in Second

At the call after the auctions, business was done in Second orange for delivery, July, 72s. 6d.; August, 73s. per cwt. At to-day's "call" there was a fair amount of animation, and 1,100 cases changed hands at 1s. per cwt. below yesterday's quotations. The following are the prices:—

April May July Aug. s. d. s. d. 200 at 300 at 200 at TN Orange sellers .. 72 0 70 6 71 0 71 0 400 at 70 6 68 0 buyers • • AC Garnet sellers 57 0 57 57 6 59 0 nominal. buyers 55 0 56 0 57 0

The shipments from Calcutta to the United Kingdom in the

first half of April were 1,700 cwt. (6,300 cwt. last year); to the United States, 300 cwt.

A comparison of the relative position of orange shellac during the three years ending March 31, 1889, 1888, and 1887, gives the following results:—

Orauge Shellac	1838-9	1887-8	1886-7
Average price for the year (TN)	55s. 8d.	47s. 4d.	47s. 9d.
" stock of the year (cases)	75,521	71,788	62,242
Total imports ,, ,,	41,907	63,305	48,654
" deliveries " " "	53,028	45,891	47,794

SABADILLA SEED.—The cornering of this article in Hamburg has caused an advance in the price of *Veratrine*, which alkaloid is now held at 33s. 6d. to 35s. per lb., according to quality.

Spices.—Arrowroot dull. Fine OWIA St. Vincent, 4d. per lb. Chillies dull at 28s. for fair stalky Zanzibars. Cinnamon sold at 6\frac{1}{4}d. to 6\frac{3}{4}d. per lb. for fair to good Ceylon fourths. In Zanzibar Cloves there has been some private business early in the week at 6\frac{3}{4}d. per lb. for fair quality, being lower. At auction 139 bales were all bought in. Fair unpicked Penang sold cheaper at 9\frac{3}{4}d. per lb. At auction to-day rough Cochin Ginger went irregular, and frequently lower; but cut sorts brought dearer rates: small to bold cut, 23s. 6d. to 53s.; small to fair rough, 17s. to 18s. 6d. Jamaica finds a good sale: small, partly washed, to bright brown, 57s. 6d. to 72s. per cwt. Mace is quiet after the recent rise. This article is said to be at present under the influence of a syndicate of English operators. Fair but mouldy Penang 2s. 10d. to 2s. 11d.; ordinary to bright West India, 2s. 8d. to 3s. 1d. per lb. Nutmegs quiet with sales of West India, 2s. 8d. to 3s. 1d. per lb. Nutmegs quiet with sales of West Indian 117's to 131's, 2s. 4d. to 2s. 2d.; 70's to 90's, 2s. 10d. to 2s. 8d. per lb. Black pepper was very dull at the end of last week. Private sales of Singapore near at hand were made at 6\frac{11}{16}d. per lb. Since then the market has been slightly somewhat firmer with buyers of May-July at 6\frac{3}{4}d. per lb. At the auctions, however, a very dull tone prevailed, and lower rates were accepted, fair Aleppy, 7d.; dull grey Penang, 5\frac{5}{3}d. Two boxes good heavy pepper from Ceylon; Tellicherry variety sold at 7\frac{3}{3}d. per lb. White pepper cheaper. Fair Singapore, 10\frac{1}{3}d. to 10\frac{3}{4}d. per lb. Pimento dull fair, 3\frac{1}{3}d. per lb.

TAMARINDS remain dull of sale; fairish new crop Barbadoes, 17s.; Antigua, 13s. 6d. to 14s. per cwt.

TEA.—The market does not wear quite such a holiday aspect as is usual at this time of year, most of the dealers doing a fair trade. There is no alteration in prices for *China*. Commonest Kaisows continue at 4d., fair common Soomoos and Panyong realising 5d. to $5\frac{1}{2}d$. Several chops of really fine Oonfaa—Pekoe flavoured and tarry sorts—have been sold from 8d. to $8\frac{1}{2}d$., showing a fall of 4d. per 1b., and yielding very good liquor for the money. *Assams* are in small supply. There is a strong demand for any fine tea, but poor liquoring sorts are neglected. *Ceylons* steady for all but commonest grades, but the value now shown for some time past by 9d. to 11d. Pekoes and Pekoe Souchongs should bring these grades into consumption more freely still.

TURMERIC.—A quantity of 500 bags Bengal, mostly wormy finger, catalogued for the auctions was withdrawn. Privately we hear of sales of 1,000 bags, April-May shipment, at 10s. $1\frac{1}{2}d$. per cwt. "c.i.f." terms, a decline of $1\frac{1}{2}d$. on last week's business, although smaller lots are subsequently said to have been done at 10s. 3d. per cwt.

VANILLA.—There now seems no doubt that the crop is a very short one everywhere, and privately there is a good inquiry at dearer rates.

THE AMERICAN MARKETS.

NEW YORK, April 5.

OUR drug market for some time has presented rather a tame appearance, owing to the total absence of speculation, and an unusual depression in the leading articles. Spring set in earlier than usual, but it does not appear to have brought an improvement in business with it.

(The prices in parentheses are the equivalents of quota-

tions here in sterling, London allowances not being taken

ALOES. — Curação. — Prices rule very low for lack of demand. Recent arrivals, 200 boxes, are unsold in first hands. \$3 is asked (14s. cwt.).

BALSAMS. — Copaiba. — During the last month direct arrivals were numerous, but found ready purchasers. This weck 63 cases of Angostura balsam eame to hand, and buyers are disposed to hold off, as plenty now is reported on the way. 50c. (2s. 1d.) would probably be accepted. Pará is very scaree, and no Maranham is offering at all. Peru.— We heard of sales from first hands at 85c. (3s. 6d.); it looks as if the market must go lower.

CAMPHOR (REFINED) has been raised to 32e. (1s. 4d.) by the manufacturers. Ten days ago it was offered at 27e. (1s. $1\frac{1}{2}d$.); so it is presumed the large stock of the bankrupt Boston refiner has been secured.

CASCARA SAGRADA.—The demand for genuine bark is small since the price went to 80c. (3s. 4d.), but stock is also small, and not, it is said, sufficient to tide over till the new erop. The demand for the winter-cut bark is by no means large; some grades offer at 30e. (1s. 3d.). We hear of none being exported. New season's bark is being offered from the Papilia exect, but apparent are not willing to not the the Pacific coast, but consumers are not willing to pay 15c. to 18e. $(7\frac{1}{2}d. \text{ to } 9d.)$, the price demanded; they say that the present seareity will so stimulate the collection that the market will become overstocked again.

JALAP.—The new crop has been coming to hand rather freely, 100 bales remaining in the importers' hands unsold; 11e. $(5\frac{1}{2}d)$ would probably secure it, but buyers' ideas are 10e. (5d.), or lower.

OILS (ESSENTIAL). — Peppermint.—Bulk oil is greatly depressed, and meets with no inquiry at present. Wayne County oil is quoted \$2.30 (9s. 8d.); Western, \$2 (8s. 3d.). H. G. Hotehkiss's brand has been taken for export at \$3 (12s. 5d.), but to-day the market is weaker. Sassafras. The market has declined from 48c. (2s.) to 42½e. (1s. 9d.), closing weak. Supplies are coming forward freely, but it is thought prices will not go much lower.

QUININE.—During the week a firmer feeling has developed, and now 25c. (1s. $0\frac{1}{2}d$.) is the bottom price for the *Milan* and *Auerbach* brands. *B.* & S. is held for 27e. (1s. $1\frac{1}{2}d$.); the demand is rather slow. Consumers do not carry heavy stocks, preferring to purchase as they want.

SARSAPARILLA.—Mexican has been in good demand, but prices show no improvement; $6\frac{1}{2}$ c. $(3\frac{1}{4}d.)$ will buy; 200 bales are reported on the way.

SENEGA ROOT is rather neglected, especially for export. The market for prime *Minnesota* rules $52\frac{1}{2}$ e. to 55e. (2s. 2d. to 2s. $3\frac{1}{2}d$.).

SPERMACETI is firmer. Sales are reported for export at $23\frac{1}{2}$ c. $(11\frac{3}{4}d.)$.

ACCLIMATISATION OF DRUGS IN CEYLON.

THE report for the year 1888 of the Director of the Royal Botanic Gardens in Ceylon contains the following references to the cultivation of some new economic plants in the establishments under his eare:-

Cubebs.—I regret to say that all my efforts to introduce this species into Ceylon still remain unsuccessful. I have indeed obtained after much trouble a consignment of seed of the true plant from Eastern Java, which arrived here in October, but, though I am assured that they were quite ripe, carefully collected, and well packed, not one germinated here. I have now made arrangements for having the seeds sown before leaving Java in the soil of a Wardian case, and trust I may thus succeed in getting this valuable pepper to Ceylon. It is, however, clearly a very difficult matter to obtain really ripe seed.

This has become more and more than ever an object with me, as I find, on the flowcring of a female example at Henaratgoda, that the plant from Singapore alluded to in my last report is, like that from Kew, not the true P. Cubeba, but merely P. Chaba (P. officinarum), a species with short, dense,

cylindrical spikes of fruit like long pepper (P. longum). As far as foliage goes, P. Chaba seems indistinguishable from P. Culeba, and to be constantly mistaken for it. I doubt whether there exists at the present time a single plant of the true cubebs outside of the Dutch East Indies.

We have now at Henaratgoda some sixty plants of P. Chaba (the Singapore and, formerly, Kew P. Cubeba) growing luxuriantly, but I am not aware that the fruit has any particular economic value, though it is known to afford a long pepper in Java.

Ipccacuanha.—A larger plantation of this has been formed at Henaratgoda, in long narrow beds well made up with good vegetable soil and coir fibre, under shade. At the end of the year the plants were over $2\frac{1}{2}$ feet high, and root-formation

is proceeding rapidly.

Spices.—One would gladly sec a great extension in the cultivation of these in the low country of South-west Ceylon, and this by European planters as well as native cultivators. Even a very few nutmeg or clove trees, when once in bearing, will give heavy crops for very many years without involving any expenditure whatever, and there is a steady local demand for these spices everywhere at good prices. These trees are, as I have often pointed out, especially well suited for growing round the houses of the villagers, and require nothing beyond some protection and attention when young. Nutmegs come into bearing in about seven years, and cloves in eight.

As regards *pepper*, I am glad to see it taken up on a larger scale. We have disposed of considerable quantities of both euttings and seeds of the good native variety grown at Henaratgoda, and it is satisfactory to learn that a consignment of this sort grown on an estate near Kandy, so high as 2,000 feet, has sold in London at an excellent price. This cultivation is also, of eourse, eminently suited to the native villager, by whom, indeed, it has long been practised on a small scale.

Vanilla, too, is strangely neglected. There is little doubt it can be grown here very profitably, as the expenses of its culture are trifling. This spice has been grown in Ceylon for more than forty years, but no one seems to have endeavoured to make it a special cultivation for export.

AN INCOMPATIBILITY.—Raynaud, a French pharmacist, had a mixture to dispense composed of eaffeine, benzoate of soda, and syrup of red currants. The benzoate has the property of dissolving the caffeine, and the mixture in question was perfectly clear when sent out, but when the bottle was returned to be refilled it was found that there was a copious crystalline deposit in it. On examination this was found to be benzoic acid, liberated by the free acid of the fruit syrup. The same precipitate is given if syrup of lemon be used instead of syrup of raspberry, and it may be prevented by the addition of a little bicarbonate of soda.

EUCALYPTUS OIL.—A few weeks ago samples were received from a well-known firm in Adelaide, Australia, of an oil which was elaimed by the vendors to be of exceptionally fine quality. This oil has been distilled from the leaves of Eucalyptus odorata, and the firm dispose of immense quantities of the raw material, as they have acquired from the Government a forest of 13,000 acres, which forms the basis of their new undertaking. Two sets of apparatus, each of 5,000 gallons capacity, are employed in the distillation of the oil. The samples consisted of crude oil from *Eucalyptus odorata*, s.g. 0.903 at 16°, and rectified oil of the same variety, s.g. 0.909 at 18°. Both samples, when treated with hydrochlorate of bromine, gave strong eucalyptol reactions, but no phellandren was found to exist in either. There was also a sample of the residual product of rectifleation. This appears to be that part of the eucalyptus-oil which is least susceptible to distillation. The latter sample, representing a brown-coloured fluid, has a s.g. of 0.945, and is said to be much esteemed in Australia as a soap perfume. A very peculiar taste is required to appreciate this kind of scent, for we have found it the reverse of pleasant. It strongly resembles cyminol, the presence of which body was conclusively proved by chemically analysing it. The pure newly-manufactured cyminol was subjected to an oxidation process with permanganate of potash, and the acid thus obtained has been identified as cyminol by its melting-point.—Schimmel's Report.

NOTES ON THE DRUG MARKET.

(From Messrs. Gehe & Co.'s half yearly circular.)

ARAROBA.—Although since last spring the imports of this drug into Hamburg have ceased, the stock in first hand still appears to be fairly important, but the pretensions of holders are very much higher than the existing quotations. The consumption of araroba, both for the manufacture of chrysophanic acid, so called, and for exportation in powder form, is a regular one, and the prices asked by the owners will therefore probably have to be conceded before long. It is said that fresh consignments from Brazil will only pay when decidedly better rates are realised here.

ARSENIC.—The noticeable diminution in the output of arsenious orc both in German and forcign works has caused a limitation of the production all round. The increasing demand for all varieties of arsenic could, therefore, only be partially met, and contracts for delivery over the whole of the year have had to be declined already. A considerable increase in the price of ground red arsenic, flour of arsenic, and yellow and white lump could therefore be obtained; and as the Silesian and English works are also quoting higher prices the general advance will no doubt make further progress. Arsenium only has not been affected.

Balsam Copaiba.—The price of genuine Maracaibo balsam has materially advanced, and still higher quotations have been avoided only because of the large arrivals of Brazilian balsam from Bahia at Hamburg. The imports of the latter variety are estimated at about 1,100 cases, against only 250 cases Maracaibo and Angostura balsam, the two latter varieties being continually in demand for New York at high prices. It is said that the adulteration and manipulation of the article is still practised very extensively, and that special deftness has been obtained in so "working" Bahia balsam that it is very difficult to distinguish it from genuine Maracaibo. Thin Pará balsam, also, is no longer obtainable freely.

CARRAGHEEN Moss.—All classes of carragheen moss are already becoming very scarce. Owing to the prevailing rains only half the quantity gathered in 1888 has been obtained at the Irish and French coasts, and as the new carragheen will not be brought to market until July it is quite possible that the already high quotations may advance still further. Fine selected lichen is almost unobtainable even now.

CASCARILLA has remained high in price, good silvery quality having realised 41s. per cwt. in London. Since the commencement of the new year there have been fresh arrivals, but without much influencing the value, nor could the quality be greatly recommended. Another parcel is shortly expected in Hamburg direct from Nassau, in South Africa. (We always understood Nassau to be a place in the West Indies, nor did we ever hear of cascarilla coming from South Africa.—Ed. C. & D.)

CINCHONA.—As regards druggists' barks, Maracaibo and Porto Cabello barks have throughout been in good demand at comparatively far too elevated prices; these very poor barks are still frequently bought in some parts of the Levant and in Russia from old habit. Succirubra has of course been very cheaply obtainable from Java. The grey Guayaquil, Loxa, and Huanoco barks have continually been scarce and dear; genuine Loxa bark especially is very seldom met with. Red bark was inquired for from Holland and Italy, but the selection is a most unsatisfactory one, and it seems that the trees which yield this bark are in the expiring stage.

COWHAGE —The last imports from India are nearly consumed. Fresh shipments will come higher in price because of the difficulty of collecting the drug.

MANNA.—Last year's manna crop, of which the forecasts were at first unfavourable, owing to the extreme heat alleged to have prevailed during the collecting season, has after all given a satisfactory result, especially for gerace, for which the demand was only very slight. The stock of drop in Sicily has been much reduced already, and the holders are only willing to accept an enhanced price unless broken drop be purchased collaterally.

OTTO OF ROSE.—The production of otto of rose in the Bulkan mountains, in the neighbourhood of Kezanlik,

yielded about 500,000 meticals last year, i.e., about the same quantity as in 1887. Nevertheless, the price was quoted a little lower than in the latter year, and almost equalled that of the cheapest seasons on record; partly because good supplies were still left in stock from 1887, partly because increasing attention is now being paid to the manufacture of otto of rose in other districts. And although the quantities which are gained in Northern Bulgaria, in the neighbourhood of Broussa, as well as in the Caucasus, cannot as yet compete with a production of 2,400 kilos., such as we may calculate to be obtained in Roumelia, still they are sufficient to compel some caution in the pretentions of the Roumelians. [The Broussa plantations are not, as far as we are aware, situated in Northern Bulgaria, but near Broussa, on the Asian side of the Bosphorus.—Ed. C. & D.]

QUILLAYA BARK merits attention at present. The low prices which have ruled in Europe in conjunction with the greatly advanced freights have prevented the Chilian exporters from making consignments of the article, and moreover it is said that only very little has been peeled. In Havre, where only 250 tons were imported last year, against 875 tons in 1887, the quotations have already advanced 6f. per 100 kilos.

SABADILLA SEED.—After having advanced by about 5s. per cwt. during the summer months, sabadilla seed subsequently again lost this advantage, the sales being limited to the consumptive demand only. But during the last few months the situation of the article has changed altogether. While the consumers have been compelled to take several parcels out of the market, hardly anything of the 1888 crop has been sent over from Caracas, thus showing that the low prices have affected the gathering. Although the Hamburg stock is large enough to satisfy all requirements up to the end of the year, prices will still have to advance further to induce Venezuela labourers to occupy themselves with the gathering of the seed next autumn.

SAFFRON.—The adulterations of this drug are again becoming very prominent, and are effected with the utmost refinement. Thus, for example, we recently had occasion to examine samples of a parcel consigned to Germany, which consisted for the greater part of exhausted saffron, recoloured with a coal-tar dye.

SPERMACETI.—The declining tendency in the price of spermaceti has been maintained throughout the past year; in the autumn at the commencement of the new production 30 cents per lb. was quoted in New York, but in January the price had declined to 22 cents. It is difficult to point out the cause of this depression, the shipments to Europe having been moderately heavy; nor has sperm oil been produced in too great abundance. Quite recently there has been a rise to 24 cents, and the quotation may easily advance still further, as the large manufacturers are said to be full of orders.

VANILLA.—According to all reports a complete failure of the vanilla crop has succeeded last year's abundant yield. In Mexico the crop has been entirely destroyed by rain, and the news of this fact caused prices to advance a dollar per lb. in one single day on the New York market. It is true that Mexican vanilla has ceased to play a part on the European markets for many years, but the varieties here current, such as Mauritius, Réunion, and Seychelles, have also shown a The 1888 crop in Mauritius is considerable deficiency. estimated at only 34,000 lbs., against three times that quantity in 1887, and in Réunion at 11,650 kilos. against 41,000 kilos., while in the Seychelles, the bulk of the crop having been shipped already, not over 5,000 lbs. are said to remain in the hands of the growers. The aggregate of these figures is not at all sufficient for the annual consumption, which hitherto required from the London market alone 400 tins, or, say, 5,000 lbs. per month. The stocks also have been lightened considerably. In the middle of January, 1889, the first and second hands together in Paris and Bordcaux owned only about 22,000 kilos., while in London there were 300 tins, against 1,500 tins in 1888, and 400 tins in 1887. The London quotation for medium lengths was: 1889 = 12s. 6d., 1888 = 16s., 1887 = 21s. per lb. Under the abovepictured circumstances speculators have seized upon the article. The advancing tendency which has become strongly marked since January has developed itself further and will continue to progress, and low prices must not be expected again this year. It is reported that the prospects for the 1889 crop also leave much to be desired. The quality of the 1888 has been a very good one, the long beans which were so scarce last year are very well represented this season, and even beans to 9 to 10 inches in length are frequent. But there is a noticeable lack of short beans from $4\frac{1}{2}$ to $5\frac{1}{2}$ inches long, and for this variety prices are paid which are, perhaps, out of proportion to the others.

NOTES ON ESSENTIAL OILS.

(From Messrs. Schimmel & Co.'s Half-yearly Report.)

LIME OIL.—The peculiarity of the fine hand-pressed West Indian oil of limes in becoming cloudy after repeated filtrations cannot unfortunately be obviated. The production of this oil cannot be extended successfully in Montserrat, or any of the other West Indian islands, because the present low values of the Sicilian essential oils render the development of any competing industry extremely difficult.

PATCHOULY OIL.—Stimulated by the favourable realisation of previous consignments, heavy supplies have arrived from British India and Penang during the last half-year, and these have caused prices to recede considerably. Some parcels of very stalky and dusty leaves from Calcutta had to be sold at any price to find buyers. These favourable opportunities have been made full use of for distilling purposes, and the important perfume is now again obtainable in large quantities, and at advantageous prices. The island of Réunion is a new source for the supply of patchouly leaves. Samples from that quarter showed an article almost free from stalk, but very pale in colour.

PINE OILS.—A strong competition has set in in all pine-needle oils, each firm claiming the first place for its own products. Yet, when closely examined, considerable variations are found to exist between the various distillates, more particularly with regard to the oils of *P. picca* and *P. pumilio*. The turpentine of the *Pinus picca* (known as Burgundy pitch) contains 24 per cent. of an essential oil of a pleasant flavour, but the oil of the needles is far more aromatic and intense in its odour. Still more pronounced are the differences in the ordinary oils of the *Pinus Sylvestris*. The essential oil of the *Pinus balsamea* is derived from a tree of the same family from which the Canada balsam is obtained.

PEPPERMINT OIL.—According to our firm conviction the increase in the consumption of peppermint oil does not bear a healthy proportion to the colossal increase in the production of the article, and the markets of the world are suffering chronically from a surplus of unsaleable stock, which stands in the way of any improvement, however profitable otherwise, in the price of any particular variety. The increasing cultivation of the herb in many European countries, unfavourable Customs duties, and other causes have combined to exclude the American oil from many formerly important markets. An attempt to estimate from the best possible sources of information the world's production of peppermint oil in the year 1888 has led to the following figures:—

						lbs.
United States	s (Ne	w York	State	e)		78,400
" "	(Sta	tc of Mi	chiga	in)	••	60,500
England (Mi	tcham	distric	ts)			11,200
" (Ca:	mbrid	ge and	Linco	lnshir	c)	3,100
Japan	• •	••	••	• •		143,400
Italy		• •	••	••	••	2,700
France	• •	••	••	• •	• •	10,300
Germany	••	••	• •	••	• •	900
		PG 1 - 1		200		710 500
		Total	••			310,500

These figures clearly show the importance of the Japanese oil as a factor in the market, and all indications point to the steady increase of the production of that country. The Lincolnshire production amounts in normal seasons—such as 1885 and 1886—to about 7,000 lbs.; but the two succeeding years were among the most unfavourable ever known, and the aggregate production of 1887–88 is estimated at not over 3,000 lbs. In France the cultivation of peppermint oil is mainly divided among three departments, the Alpes Mari

times being the principal one, yielding about 8,500 lbs., to produce which over 1,500 tons of green herb are said to be necessary. The yield in the department of the Var is estimated at about 1,100 lbs., and in the Basses-Alpes at about 750 lbs. of oil. A large part is consumed in France, the exportation being comparatively small. With regard to the Japanese production, which is obtained from two crops, in April and October of every year, the following figures relating to the shipments from Yokohama clearly show the decay of the trade, and the impression would be still more accentuated if figures could be quoted of the Continental stocks, which are known to be very heavy and to consist of an assortment of oil of several successive seasons:—

```
1887
                                             1888
                   .. Cases 112 .. Cases 104 .. ,, 867 .. ,, 72
To China .. .. .. ..
To China
                                               72
                              551 ..
                                             551
 " United Kingdom ...
" Franco
                                               41
                              269
                          22
                                          "
 " North America ..
                               89 ..
                                             102
                          22
 " Other Countries ...
                               6
                                                6
                             1,894
                                             876
                                       1bs. 58,900
             Or about 1bs. 127,200
```

The production of peppermint oil in Italy has been attracting more attention lately, but the prices demanded by the makers are too high. The cultivation of peppermint in Italy is stimulated by the duty on foreign oil, equalling nearly 3s. per lb. The examination of two samples of Italian oil yielded the following results:—

First sample: Foglie di Menta:-

```
Specific gravity .. 0,921° at 19°
Boiling-point about .. 195°—222°
Fractionally distilled .. at 195°—210° = 44 per cent.

" " " 210°—222° = 37 "
Residue .. .. 19 per cent.

Kept in a freezing mixture no menthol separated.
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Second sample: Fiori di Menta:-

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Specific gravity .. 0.915 at 19°

Boiling-point about .. 195°—222°

Fractionally distilled .. at 195°—210° = 57 per cent.

"" " 210°—222° = 36 ",

Residue .. .. 7 per cent.

Kept in a freezing mixture no menthol separated.
```

These results show both samples to be inferior in quality to fine American oil. The total absence of menthol is remarkable. The culture is carried on in Piedmont, near Pancaglieri, Costigliole di Saluzzo, Cuneo, Perosa, Lingotto, and Pinerolo, and also in the Province of Padua. In the latter there are four distilleries, which claim to produce an aggregate of about 1,100 lbs. per year. In Piedmont the production is said to be double this quantity, or about 2,200 lbs. per annum, yielded by about 75 acres under cultivation.

A sample of Russian oil, produced, so far as is known, in the government of Woronesch, gave the following results:—

```
Specific gravity .. 0.908° at 20°

Boiling-point about .. 195°—222°

Fractionally distilled .. at 195°—210° = 43 per cent.

7, 210°—222° = 40 ,,

Residue .. .. 14 per cent.
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In a freezing mixture the oil became syrupy, indicating a small proportion of menthol.

SANDALWOOD OIL.—The price of fine grades of wood, rich in oil, has not altered, although neither fine Bombay nor Tellicherry logs and root have been offered to any considerable extent. The quality which is being offered from Mysore also deserves attention.

YLANG-YLANG.—The difficulties which the production of ylang-ylang has experienced in 1888 may be gauged from the following abstract of the arrivals of the well-known "Sartorius" brand, which during the last five years have been as follows:—

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Years .. 1884 1885 1886 1837 1888
Kilos. .. 25,200 163,800 134,400 109,200 54,600
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The firm in question state that, while 100 kilos of freshly-gathered flowers only yield from 425 to 430 grammes of fine ylang, the manufacturers of common qualities are able to obtain twice as much oil from the same quantity.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read. Ask us anything of pharmaceutical interest: we shall do our best to reply. Before writing for formulæ consult the last volume, if you have it. Letters, queries, &c. will be attended to in the order received.

Pharmacy Act (Ireland).

SIR,-My attention has been called to a paragraph in your issue of this date purporting to be a report of a meeting of the Dublin Chemists and Druggists' Association.

It is there circumstantially stated that "the Pharmaceutical Council now proposes that the registration of those in business without examination should be limited to those in the trade before January 1, 1888."

The Council has not made this or any other proposal; and, in fact, has not had the Bill formally before it since the close of last session.

A friendly conference has been invited, at my instance, between our law committee and the representatives of our last year's opponents, in order to try and arrive at some understanding which will make it possible to draft a practically unopposed Bill.

Personally I am strongly opposed to registering any person who does not submit to an educational test, and I think the Council is unanimous upon that point.

As an educational body we would be stultifying ourselves

if we took up any other position.

Of course those whose rights were reserved in 1875 must be registered without such a test, but all other persons were placed under a disability by the Pharmacy Act, and if that disability is removed by new legislation, it must be under the condition of satisfying an educational test.

It is perfectly obvious that the only hope of legislation rests on a settlement of their difficulties by a mutual agreement between all parties concerned outside Parliament. An opposed measure, no matter who promotes it, is doomed to failure. Yours faithfully,

Pharmaceutical Society of Ireland, J. E. BRUNKER. 11 Harcourt St., Dublin, April 13.

Openings in Australia.

[This letter comes from South Australia.]

SIR,—I would not trouble you or myself by writing this letter and sending it to you but for the seriousness of the question. If you turn to Gordon & Gotch's "Handbook," you will find that chemists and druggists are set out as "Not wanted"; and a greater truth was never printed in any book. I and, no doubt, every chemist who has any feeling at all towards his fellow-tradesmen must be astonished at your statements. Lean only repeat the few astonished at your statements. I can only repeat the few words which Mr. Thos. Burt, M.P. for Morpeth, wrote to me when he was giving me his opinion about emigration from the old country to these colonies. He said, "Nothing seems to me more cruel and inhuman than to take poor people to distant, countries without a fair recent of their setting. distant countries without a fair prospect of their getting a livelihood." And it is really cruel and inhuman on the part of THE CHEMIST AND DRUGGIST to advise young chemists between 25 and 35 to come out here as things unfortunately are at present. If members of the wholesale drug houses in the colonies have informed you, sir, of the dearth of chemists and druggists, all I can say is that such conduct on their part is doubly "cruel and inhuman," as they must know that there are enough of these poor chemists

here already struggling for mere existence (not life). Do these men mislead you, or are there any other body of men in the trade scheming to get "cheap labour," or assistants at wages, say, 1*l*. per week or less, and for them to find their own board and lodgings with that sum? It looks like it. A member of one of our wholesale houses wrote to me lately, and in his letter he said, "There is no use trying to do business in this city; there are too many already." And I believe he is one of the most truthful of men, besides being naturally of a kind and humane disposition; and I ean say truthfully that the few Australian eities are now too full of chemists by rights, and that it would be a hard struggle for a poor fellow to get a berth, even if he was a Minor or a Major. They have first-class schools of pharmacy in Melbourne and at the Sydney University, and schools and pharmaceutical societies now in every colony, and a great number of well-educated youths in them ready to earn their daily bread in after-life in these colonies. A few years ago a great outery arose in all the colonies against any more poor people being immigrated here, and now every colonial Government has ceased to allow a penny to be put on the estimates for that purpose. This news (if it is so to your readers) should be a strong warning to them not to come here—at present, at all events. The population in these eolonies is almost at a standstill. If such a state of things were existing in England people would say, "We are drifting fast to decay." Trade here in all its branches is fast drifting into the hands of powerful monopolists. Our retail trade is a miserable one in the inland villages. The stores in every one of them are actually supplied with 3j. or more or less sized bottles, ready labelled, of tinet. opii, tinct. camph. co., glycerine, spt. of nitre, spt. ammon. aromat., &c.; in fact, these stores are chemists' shops in reality. It is such places and homes which are awaiting your Minors and Majors in these colonies, and not Melbourne, Sydney, Brisbane, Hobart, Adelaide, or Dunedin. The mistake is that men like Lords Brassey and Carnarvon, Dr. Dale, Mr. Augustus Sala, Mr. Froude, &c., judge these colonies from what they saw in those cities only. Inland you will find no habitation for hundreds of miles, and then only small poor villages; they call them townships here. It is a cruel mistake on the part of these men who are in plenty to go home and write to the Contemporary Review, or any other paper, and describe these colonies as the land which "flows with milk and honey" and "the working-man's paradise," &c. Also, with the exception of New Zealand and Tasmania, there is a terrible hot wind, dust-storms, and heat here for months in the year, and the flies are great tor-menters. In such countries as these where, as Dr. Dale said, the climate in three-fourths of its area is tropical, industrious and sober, honest men ought to be able to retire in five or ten years. But, as things are now, a lifetime will not enable one to do so; it is the wealthy capitalist only who is able to do this. Old England, with all its faults, is, as a home for the honest plodder, quite equal to these colonies. The plums you mention are fewer than you believe. To Minors and Majors who are the lucky owners of 2001., 3001, or 4001., I say, keep them safe there; 4001, there will prove more valuable to you than 8001. here. The rents, cost of living, &c., here are more than double those of England. Besides, we are head over ears in debt; some 3,000,000 of poor people steeped in debt to home money-lenders to the tune of 170,000,000l. The average debt per head is between 60l. and 70l., every colony having trade protection to the very teeth against one another, and everything we wear, and eat, or use is taxed to the very utmost, and gloomy times and troubles ahead.

If we had population prosperity would be seen on all hands. But until great social and political changes happen in Great Britain and Ireland there will be no change here; the reaction then will bring the "great awakening" on this continent.

Australasia, February.

COUNTRY CHEMIST.

Commercial Travelling.

SIR,—I was recently asked by a lawyer, "Why do you keep commercial travellers? Can't your customers write? In my professional experiences I have found nine-tenths of the cases of disputed sales that find their way into the law courts arise in the first place through the traveller." The

answer has hitherto been, we (the wholesale dealers and manufacturers) have kept travellers for the accommodation of customers, thinking that will be a mutual facility as regards sales and settlements. But to my mind the time has now come when there should, on the part of the retailer, be a more general expression in favour of, or against, the mode of transacting business through the intermediate representative of the house of which goods are bought. Let us not consider the impecunious trader; his voice would naturally be against the periodical visits of the traveller, which restrict his time of credit. But in the cases of the perfectly solvent ones, now that there are so many more increased facilities for acquiring knowledge of prices and markets (your admirably-conducted journal, for instance); now that cost of postage is not a consideration; now that goods are not bought in such bulky consignments, to save carriage, as of yore, it would be beneficial to ascertain whether they, as a general community, prefer to be waited whether they are the proposed the boundary their on by representatives of the houses whence they draw their supplies.

In my own experience—and others have told me the same— I have had letters from retailers asking if they could have an extra discount if they remitted periodically at the same time that the traveller would otherwise have waited on them, forgetting that the fact of their not being the sole customers in that town would still necessitate the expense of sending

What is wanted is for solvent retailers to state whether they prefer to be waited on periodically, so that a more

general voice should be heard on the question.

As regards the wholesale dealer who is waited upon by the representative of the manufacturer, there is but little doubt that he is very often extremely apprehensive of his visits. The traveller, especially if a young man with officious zeal and desire to show his employers how important he is to them, will not unfrequently push injudiciously in the wrong place, and by calling on his customer's customer do no more actual amount of trade, but cause aggravation to all concerned. This happens over and over again. I trust that some of the leading retail chemists will express some opinion as to the question on which I have touched.

Yours truly, MANUFACTURER. (30/36.)

The Patent-medicine Trade.

SIR,—In Uncle Remus's admirable tales there is one where the elephants trod upon and wiped out of existence one or two of the terrapin (tortoise) family; the remainder of the family, unable to get any redress, burrowed into the bowels of the earth and let loose the springs, which poured up vast volumes of water on to the earth and caused the flood.

The poor chemist is not unlike the terrapin; he has been crushed by his big neighbours, the stores and the grocers, and he has not been able to get any help or redress, so now he gives up the idea of ever getting a living profit out of patents, and endeavours to meet the wants of the public with preparations of his own make. The bulk of us are thus undermining the stores, and are bringing forward preparations the intrinsic value of which is incomparably superior to the general run of patents. Now we can already see what cutting has led to. The balance-sheets of some medicinc companies tell a tale which does not require a philosopher to understand, and the sale of most of the leading patents is no doubt gradually diminishing. The proprietors, who, I dare-say, benefited at the first when cutting was introduced, made a great mistake in not giving due consideration to the probable weight and influence the trade would bring to bear on the question when they found their usual profits taken away.

It is too late now, I think, for any steps to be taken to bring the old trade back; I, for one, do not wish it. I have much more satisfaction in pushing my own articles, which I can personally guarantee. Every chemist is more or less an educated man, he has a great influence over the medicinetaking public, and if he has sufficient knowledge and experience and tact to place first-class remedies of his own, the public will prefer them; and who is to blame? Not the chemist, but the large proprietors who have not observed the

signs of the times, but have looked upon the trade as mere retailers instead of recognising them as their best and I am, yours truly, natural allics.

SIR,—The report of the meeting held under the auspices of some of the wholesale patent-medicine dealers, in your issue of March 23, has only to-day been brought to my notice. Though it is quite true that the profit on patent medicines is very meagre to the dcaler, the matter rests entirely with him, there being no compulsion to do any trade that does not leave a living profit, and I notice that some of those who complain have been the first to reduce the profit by "cutting." Those who will trade on a non-remunerative basis must necessarily "go to the wall" sooner or later; consequently the question of a reasonable profit must find its level, without combination, and the fittest is bound to survive. Yours faithfully,

W. H. MARTINDALE, Director of Thompson, Walters, Hole & Co. (Limited).

Curtain Road, London, April 15.

The Patent-medicine Act.

SIR,—I am very sorry I did not make my meaning clear in the letter I wrote to you, which appeared in No. 467. The questions I intended to ask were:—(1) Why is Ireland exempt from the Medicine-stamp Act? "Scot Abroad," in your last number, says he does not know; but I presume somebody can give a reason. (2) Why should England, Scotland, and Wales submit to this tax, while Ireland is exempt? Surely what is good for Irishmen is good for us; and I maintain we in this country have an excellent argument with which to go to Parliament and ask for the total repeal of this most obnoxious and unjust tax. Your remarks respecting the sale of English manufactured and stamped patents in Ireland do not apply to the points raised in my letter. Yours, &c.

REPEAL. (27/20.) April 10.

Oil of Anise.

SIR,-Referring to the leader in your issue of the 6th inst. on oil of anise, it is remarkable that Messrs. Schimmel & Co. did not perceive what you so clearly point out, viz., that the remarks on the properties of oil of aniseed and oil of star

anise referred solely to the "United Kingdom."

Further inquiries result in the conclusion that my estimate was, if anything, very moderate. The respected correspondents in London of Messrs. Schimmel, viz., Messrs. A. Faber & Co. and Messrs. C. Gross & Co., would no doubt be able to advise them of the number of cases of oil of star anise im-

ported into London.

Of course, when one comes to proportions of this magnitude, figures become figures of speech; but the fact remains that in these islands the consumption of aniseed oil is very minute indeed compared with that of oil of star anise. easy to understand why the converse should be true of Germany and other European countries.

Yours faithfully, John Moss. Galen Works, Deptford, April 15.

Northern Cutters.

SIR,—As a contrast to the "weeping and wailing" epistles that have filled your columns lately it is pleasant to read that of "Hopeful" in your current issue. Perhaps, seeing "Hopeful" is "out of the wood," and so can afford to "holler," he might aid his less fortunate brethren by telling them what are the proprietaries he has found most successful and profitable; how labelled, how worded, and sizes, and general get-up. This the writer for one would deem a great favour. In the town I belong to in the North cutting is ram-pant, not in patents only, but in drugs too, and, strange to say, the two "utterly out-and-outers" are Major men, one of whom fills up his window with paints, candles, and such articles, together with a few Winchesters of sp. æther. nit., &c., with the wholesalc house's label still thereon. This does

not react to the advantage of said house, as I never do any business with any house which I know supplies cutters, and many others I know follow the same rule.

Yours sincerely,

April 13.

MARINUS. (29/49.)

Euonymin.

SIR,—With reference to the colour of euonymin, there seems to be a great diversity of opinion as to whether the green colour is due to chlorophyll or to artificial colouring agents. It has been stated as impossible to make green euonymin from either young or old bark. It should be noted that two plants go by the name of wahoo, viz. Euonymus atropurpureus and E. Americanus. The text-books specify Euonymus atropurpurcus as the correct plant to be used; and the eclectic school use this bark. None of the bark as it comes into the market appears to contain much chlorophyll.

I have recently prepared euonymin from the valoid fluid extract of euonymus, prepared from the twigs of the *Euonymus atropurpureus* by Messrs. Burroughs, Wellcome & Co., by cold repercolation, carefully avoiding a high temperature in evaporation, and a beautiful green-tinted product is the result. I have taken some of this in 1-grain doses, and find it has a decided stimulating action on the liver. Mr. J. J. Miller recently prepared a white, intensely bitter, odourless, uncrystallisable solid. I have tried to obtain this, but failed to do so. The green colour is destroyed by filtering the alcoholic solution through animal charcoal, and a dirty brown colour is the result; by evaporating this at a low temperature the same coloured product is obtained.

April 14.

Yours truly,
A. BALL.

The Oss. Question.

SIR,—I have noticed for some time the controversy going on respecting the real meaning or value of the symbol "Oss." I think the answer is in the compass of a nut-shell. The symbol "Oss.," no doubt, literally means one-sixteenth of

something.

What is that something? Suppose that something should be the imperial gallon (liquid), and as we only have one standard gallon measure now, and it is divided into eight pints, each pint containing 20 fluid oz., the gallon eonsequently being 160 fluid oz. Therefore, if the symbol "Oss." is intended as a partition of the imperial measure (there being no other), it must be the sixteenth part, or 10 oz. If any of your correspondents have been looking over any old medical works, such as "Thomas's Practice," &c., they would often find the symbol "Oj.," &c, in their recipes, and which at that time would be the representative of 16 oz., or the eighth part of the then gallon of 128 oz. It is now over sixty years since the present imperial gallon of 160 oz. was legalised.

Cullercoats.

OCTOGENARIUS. (30/5.)

Sale of Medicated Wines.

SIR,—We notice in your issue of April 15, page 519, under the heading "Liverpool Chemists' Association—Discussion on Trade Subjects," that the sale of medicated wines was discussed, and that the President stated that the chemists ran serious risks in supplying their orders if they did not hold the necessary licence, and he moved that a petition should be sent to the Inland Revenue authorities calling attention to the difficulty, and suggesting that an ad valorem stamp should be imposed in lieu of the licence duty.

stamp should be imposed in lieu of the licence duty.

We wish success may attend this petition, but from our long experience of the feeling of the Board we have no hope of their acceding to the request. We have for some time past offered to meet the difficulty by paying the entire cost of the licence, provided six dozen of our preparations are ordered, and we would respectfully suggest that, pending the alteration of the law, chemists would do well to put themselves on the safe side and take out a licence.

Norwich, April 15.

Yours truly, COLEMAN & CO. (LIMITED).

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Toluinated Ointment.

How should the following ointment be made?-

Balsam, tolu		-			3ii.
	••	••	• •	• •	orj.
Ol. rosmar	• •	• •	• •		mxv.
Tinct. cantharidis	• •				3j.
Ol. olivæ	• •	• •	• •		3iv.
Vaselin. ad		• •			Зij.
Tet manage					

M. Ft. unguent.

SENEX. (29/29.)

[A large portion of tolu balsam dissolves in fixed oils, especially easter oil. The best plan to follow with the above ointment is to heat the oil and balsam together, then add $\frac{1}{2}$ oz. of vaseline, and continue the heat for a few minutes; allow the undissolved balsam to subside and pour off the clear portion; with this mix the rest of the vaseline and the other ingredients in the ordinary manner.]

A Cough Mixture.

S. R. wishes to know why the following mixture turns to a purple red colour directly the ingredients are mixed:—

Potass. bicarb	• •		• •	• •	Зij.
Liq. ammon. acet.		• •	• •		3j.
Spt. æther. nit		••			3iv.
Vin. ipecac		••		••	3ij.
Aquæ ad					3viij
Ft. mist.					

[The colour is also produced without spirit of nitrous ether. We attribute it to the action of the alkali upon the colouring matter of the wine, the potash and ammonia salts apparently reacting previously.]

LEGAL QUERIES.

10/28. A. S.—We are called upon to answer questions about registration of trade-marks almost every other week. Full particulars are given in the DIARY for 1888. You have to get an application-form, which can be had at some large post offices, or from the Trade Marks Office, Southampton Buildings, Chancery Lane. This will cost 5s. If the Registrar accepts your trade mark you will have to pay a further 20s. Then you are liable to have it opposed. Without knowing all details and hearing both sides, we cannot, of course, tell whether by registration of your mark you would be able to stop a particular imitation. You could only stop it through the Courts; the registration by itself will not necessarily bring about the result you wish for.

28/39. T. O. M.—We should consider you render your dentifrice liable to medicine stamp duty by stating that its use prevents toothache.

27/26. W. T. C.—There cannot be any doubt, we think, that according to the Pharmacy Aet patent medicines are as much subject to the labelling requirements of the 17th clause if they contain scheduled poisons as the same substances sold in other forms. If, for instance, an article may be fairly described as "a preparation of opium," the law requires that it should be labelled with the name of the poison, with the word "Poison," and with the name and address of the seller. As a matter of faet, all this is never done. Whether a compound is or is not a preparation of a poison because it contains that poison, depends, we consider, upon the proportion. If the poison is the essential ingredient the compound should certainly be labelled.

30/42. An Old Subscriber.—As such you ought not to need an explanation of the position of limited liability companies as regards the Pharmacy Act. They are not affected by its.

provisions as to keeping open shop, but they must obcy the 17th section as to the labelling of poisons, registering the sales, &c., as much as other people.

10/33. Traveller.—There is no means of stopping hawkers from plying their trade so long as they have a proper licened and do not eause an obstruction. With regard to the latter, the police or the local authorities are the proper parties to prosecute. The principal Act applying to hawkers is 50 Geo. III. chapter 41. This Act expressly exempts all persons who sell in a public market-place or at a fair from having to take out a licence. It has been held, however, that such market or fair must be one held in a place duly constituted by law, and not a mere place which stall-keepers or others may have chosen to establish themselves. A hawker's licence is not required by vendors of fish, fruit, or victuals, or the real workers or makers of any goods, selling or exposing them for sale in any market or fair, city, borough, town corporate, or market town. It follows, therefore, that any person may sell in a market or fair subject to payment of tolls, and that vendors of fish, fruit, or victuals, or makers of goods, may hawk them about without a licence in any such places as above mentioned, but not elsewhere. Duly licensed hawkers can sell anywhere.

27/41. Assistant, engaged on usual terms, is told at the end of three weeks to leave at the end of the month. Can he in that case claim a month's salary in lieu of notice? The reason for leaving is not a personal one, but is consequent on alterations in business arrangements.

[In the absence of an express agreement on the hiring of the assistant that he was to come for a month on trial, such assistant would be entitled to a proper month's notice in the usual way, unless the employer can prove a custom in the trade that an assistant can be discharged at any time during the first month at the expiration of such month. There is no case, so far as we are aware, of any such custom having been proved, and the onus of proof would lie on the employer. Very full and strict evidence is always required to establish any custom, and it must be shown in every case that such custom has existed for a number of years, and is one that is universally recognised in the trade. Most likely if "Assistant" were to take proceedings he would recover.]

31/16. Alchemist.—There is nothing illegal in a widow carrying on the business of her deceased husband with a qualified assistant as manager taking an apprentice.

31/65. X. Y. Z.—No one can legally describe himself as a pharmaceutical chemist unless he has been qualified by the Major examination, or unless he was a member of the Pharmaceutical Society before 1852.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

27/25. Curação Flavour. February 18, 1888, page 233.

27/30. Cod-liver Oil Emulsion. Scptember 8, 1888, page 303. Hypophosphitcs may be added.

27/30. Bay Rhum. See DIARY.

29/33. Aqua Mellis. February 25, 1888, page 269.

249/32. S. F. R.—The leading druggists'-sundries houses will supply you with a nitrous oxide inhalation apparatus.

21/6. Mona.—Mcchanical support is the only remedy for varicose veins.

21/41. J. R.—The following is the formula for Pigmentum Ohrysarobin:—

22/20. Yorkshire Bite.—The best colouring matter for sausages is a dry "vegetable colour," which you can obtain from such firms as Stevenson & Howell.

25/41. Juniper.—The Early Closing Association, 100 Fleet Street, did supply the shop hours notices. Probably they have some still.

21/58. B. H. A.—Mineral-water stands are supplied by Messrs. W. & J. Burrow, 15 Seething Lane, E.C. If you want one of a special design you had better get it made at your local foundry.

25/67. Thanks.—We reported such a case a few weeks since.

15/19. W. R. B.—Messrs. Potter & Clarke, of 75 Weston Street, Southwark, or Messrs. Butler McCulloch & Co., Covent Garden, would supply you with seeds, &c., for medicinal plant.

251/17. A. C.—If you will refer to the index to advertisements you will find six firms are advertising capsules. Any of these, we think, would supply those which you require.

P. K.—Thanks; but the item has already appeared in this journal.

27/16. W. H. S.—Apply to Messrs. Kelly & Co., Great Queen Street, W.C.

A. S. A.—You would have to get the sanction of the medical board before beginning business as a chemist in Natal, and we believe also in the Transvaal. The British Minor certificate would ensure that sanction.

24/35. Country Druggist would like to know what mixing machine has proved the best in the experience of any correspondent for thoroughly blending about 1 cwt. of dry powder at each operation.

31/261. Carolus.—We would rather not recommend particular journals for advertisements. If you are not in a position to judge for yourself you had better consult an advertising agent. Your other question would be more suitably addressed to a surgical-instrument maker.

27/38. A. E.—Mercuric chloride gives with most alkaloids a precipitate of a double salt of the alkaloid and mercury. It is a body of this character which has formed in your cocaine solution. Alkaloids are very similar to ammonia salts in their behaviour towards mercury compounds.

27/2. Novus. — Balfonr's "Elementary Botany" and Miller's or Wilson's "Elementary Chemistry" are suitable for Bell Scholarship Studies. Organic chemistry is not taken.

27/3. Phalinus.—(1) Candidates for the Bell Scholarship must not be less than twenty nor more than twenty-two years of age on the day on which the examination is held. (2) Greek and mathematics are not Latin, and the Pharmaceutical Society cannot accept the certificate of any examination which does not include Latin.

27/9. A Scotch Admirer.—We have on more than one occasion stated that Begbie's "Medical Information and Advice" (Nelson, 2s. 6d.) is a reliable book for counter prescribing. It is not so full as some problem. scribing. It is not so full as some works, but it is safe, and a chemist with his knowledge can supplement it himself.

27/21. Majaline.—(a) We do not know of any recently published analysis of Liebig's extract of beef. It contains 20 per cent. of salts, chief of which is potassium chloride (about 8 per cent.); 25 per cent. of water, and of the rest creatin, creatinin, and globulin are the principal bodies; but the extract does not contain gelatine. (b) No.

27/25. P. S. H.—Scurf Lotion for the Hair:—

Glycerine of borax Aromatic spirit of ammonia 1,, Tincture of quillaia 2 drachms .. 6 Lavender water .. Water 5 oz.

Mix.

To be applied at night, and the hair well brushed afterwards with a pair of clean brushes.

26/24. W. J. C.—(1) Write to the maker of the ink. (2) Coal-dust is made into "briquettes" by the addition of a little tar, and subjecting the mixture to powerful hydraulic

28/33. E. G.—Isinglass is the best material for clarifying beer. For composition powder see vol. 32, page 144 (January 28, 1888).

24/23. C. H. W.—Replying to your second letter we may say regarding the isolation of the active principles of cascara sagrada, our knowledge of these bodies being so far imperfect, that the pharmacopœial extracts represent them in the most concentrated state. You are wrong in using the word "cortex" before cascara sagrada—cascara means "bark."

28/51. Edina.—Hair Dyes.—For brown hair the ammoniated solution of nitrate of silver and sulphate of copper is reliable, and for black hair we should only have faith in the double-bottle preparation. The hair must, of course, be perfectly free from grease (natural or applied).

28/48. E. Andrews.—Bicarbonate of soda is a perfectly harmless application for the teeth, and is an excellent cleanser.

29/33. Kalydor.—(1) Glycerine Jelly:—

Mix, and, when the gelatine is soft, heat until dissolved, then add Glycerine of borax 10 oz.
Triple rosc water 6 ,,

Cochineal or saffron tincture a sufficiency

(2) The names are those by which the pomades and extracts are known in trade. You can make the latter from the former by digestion in about four or five times their volume of spirit. (3) We do not know without inquiry, but should think that you could not use the title.

28/3. J. H. H.—A pharmacist is not justified in dispensing a mixture containing 15-minim doses of dilute hydrocyanic acid.

An Enquirer and A Subscriber do not give their names. We remind them that in no case do we reply under such conditions. They must pay attention to the rules printed at the head of this section, and repeat their questions.

29/27. J. G.—Antipyrin undoubtedly relieves neuralgic affections in doses of about 10 grains, but in some cases it fails, and more rarely it appears to have decidedly toxic effects upon individuals. It is by no means a remedy which can be as freely given as quinine, and you should not sell it "indiscriminately," as you put it.

29/11. Jacobus. -- We have published a formula for Glycerine Suppositories recently. Here is another :-

```
.. 2 fl. drachms
Glycerine..
Soap .. .. .. .. Cacao butter .. ..
                                  .. 10 grains
                                  .. 50 grains
```

Dissolve the soap in the glycerine by the heat of a water-bath, and add the cacao butter; stir well, remove the heat, and continue to stir until the mixture is of a proper consistency for pouring; then divide into six suppositories.

28/1. Ernst.—(1) The preparation is made from the bark of Aletris farinosa, but we cannot say how. (2) For Polishing a Black Marble Clock try the following:-

							OZ.
Linseed oil		84	• •	• •	0-0	• •	4
Elemi		••	• •	• •	• •	••	$\frac{1}{2}$
Methylated	spirit		••	• •	••	••	2
Turpentine		••	••	••		••	5
Acetic acid		0-0	••				$\frac{1}{2}$
Water	••	• •	••	••	••		$3\frac{1}{2}$

Dissolve the elemi in the mcthylated spirit, and strain. Mix with the oils, and add the aqueous fluids.

Guython.—No, except that it adds to the apparent cost of the draught.

Vinolia.—Paix (29/21) writes to say that in consequence of the advertisement of the proprietors of the above he wrote as requested to Messrs. Blondeau & Co., 5 Rue de la Paix, Paris, and has had his letter returned by Messrs. P. Blondeau & Cie, 6 Rue de Hanover, Paris, who say that his letter was not intended for them; they also returned a postal-order for 3s. 6d., which they said they received some months ago. "Paix" will return that order to the rightful party, if he can

be traced, on application through us. Respecting this communication, Messrs. Blondeau & Cie say:-"In all our advertisements we have distinctly stated that Messrs. Roberts & Co. are our agents in Paris and in London, and we have given their address in Paris as 5 Rue de la Paix. We regret that your correspondent did not address his letter in keeping with our directions. It would appear that some over-wise postman has rummaged the Paris Directory to deliver a letter which would have reached us. all right had it been directed to our agents. We are very sorry that anyone should have sent us a remittance for goods and have failed to receive them. We can only say that we hope those who desire to obtain 'Vinolia' or 'Vinolia soap' (superfatted) will content themselves with applying to our agents, instead of to us."

30/28. Medico.—See page 399 of our issue of September 22, 1888.

30/66. T. H.—Rectified spirit is the best solvent of the odorous principles of musk and ambergris. If you wish to dissolve some of the organic matter, you must add a little carbonate of potash—10 grains to the pint.

30/18. Depilatory.—We do not have a formula for a liquid preparation.

31/43. B. H. A.—See "The Art of Dispensing," page 20.

30/60. B. Cartwright.—Tinctura Hamamelidis, B.P.C.:—

Hamamelis bark, in No. 20 powder.. .. 2 oz. Proof spirit.. .. a sufficient quantity.

Moisten the powder with a suitable quantity of the menstruum, and macerate for twenty-four hours; theu pack in a percolator, and gradually pour proof spirit upon it until one pint of tiucture is obtained.

30/14. C. E. L.—Worm Ball's for Horses.—Santonin, 1 draehm; tartar emetie, $\frac{1}{2}$ drachm; physic mass, 4 draehms. Mix.

30/45. Mason.—It is impossible to advise you, seeing that you do not tell us what the stain is, or if it covers the painted portion.

29/71. Phenol.—You will find a variety of show-bottle colours on page 175 of the DIARY. For the phenolphthalein colour you used by far too much liquor potassæ. Add 1 drachm of the latter to a gallon of water, then 20 to 30 drops of solution of phenolphthalein (4 grs. to 1 oz. of proof spirit). The colour fades quickly, no doubt.

30/6. T. I. & Co.—Seltzogene Charges.—For the 3-pint use 18 scruples of tartaric acid, in small crystals, and 22 scruples of bicarbonate of soda; for the 5-pint use 10 drachms of acid and 12-drachms of bicarbonate of soda.

31/7. A. M.—The battery you ask about appears to be the Leclanché. It consists of an outer cell of eartheuware or glass containing an inuer pot of porous earthenware. In the outer cell is placed a zinc rod, and in the inner a carbon plate surrounded with broken gas carbon and mauganesc mixed in equal proportions. This inner cell is sealed over at the top. The charge used is a supersaturated solution of sal ammoniac in the outer cell.

21/64. S. K.—Photographic Manuals.—Perken, Son & Rayment publish a good beginner's guide at 1s. Wall's "Dictionary of Photography" (Hazell, Watson & Viney, Limited, 2s. 6d.) is also very good, and devotes special attention to chemicals.

21/42. Physic.—(1) Malaria is the term often misapplied to the intermittent fever which results from living in damp and marshy districts which emanate malaria (that is, noxious exhalations). The malady which it causes is common in many parts of the United States, and may be familiar to you under the name ague, which is, perhaps, the commonest form, although in the acute stages other and more serious symptoms are prominent. Quinine is the universal remedy. A person who has once suffered from malaria is exceedingly liable to a recurrence of the attack. (2) The quantity of turpentine for paints must, of course, vary with the consistence of the mixture of pigment and boiled linseed oil, as the only object of the turpentine is to thin the mixture sufficiently for painting purposes. What is stated in the DIARY is the average amount. We note your suggestion.

Churchwarden.—It is as difficult to remove Dry Rot from a building as it is to clear a field of thistles when they are in fruit. Solution of corrosive sublimate is the best application. All the parts of the church seats already affected by the rot, together with 3 or 4 inches of the wood apparently unaffected, should be removed, as well as the ends, which are apparently the origin of the trouble. The bases of the new ends should be crossoted or inserted in pitch; the end parts of the old seats should be shaved, and saturated with solution of corrosive sublimate in weak spirit (methylated). When this dries it can be varnished, so that there will be no danger. These attacks of dry rot are sometimes very hopeless, and we have seen fine buildings stripped of the whole of the internal woodwork and refitted before it could be got rid of.

29/26. J. T. M.—(1) There are several works which you will find useful in giving you information regarding the Dye Trade. We name three in their order of usefulness: Slater's "Dye Wares and Colours" (Crosby Lockwood, 7s. 6d.), Beuedickt's "Chemistry of the Coal-tar Colours" (G. Bell & Sons, 5s.), and "Bleaching, Dyeing, and Calico-printing" (Churchill, 5s.). (2) If you draw lines on paper with solution of perchloride of iron, and expose it to ammonia fumes, the lines will become brown. What you seem to require, however, is the ferro-prussiate process of printing. See Wall's "Dietionary of Photography."

29/29. Senex.—Nutrient Suppositories are made of extract of meat, preferably poptonised, with the gelatine basis. They are generally made of 1-drachm and 2-drachm size, with half their weight of the meat extract.

20/60. Bos.—Cleansing Drink (after Calving).—Epsom salts, 8 oz.; aniseed, 1 oz.; caraway, 1 oz.; ginger, $\frac{1}{2}$ oz. Mix. To be given in a pint of gruel. Drinks before Calving.—See issue of July 14, 1888, page 62. Nourishing Drink.—Use crushed linsced as the basis, say 4 oz., with gentian, $\frac{1}{2}$ oz.; ercam of tartar, 1 oz.; and ginger, $\frac{1}{2}$ oz.

26/26. Nov.—Dr. Pavy's Pills.—We are not aware of any formula which Dr. Pavy has specially recommended for pills for diabetes. The following for Pilula Codeina Composita is much used:—

To be taken two or three times a day, the dose of codeine being gradually increased to 3 grains.

247/24. Timon.—A solution of gutta-percha (1 part in 4 of carbon bisulphide) is the best thing for uniting rubber. Apply the solution to each part to be united, heat eautiously, when dry place together, and keep under pressure for a day.

26/43. Dulcis Carnabyn—(1) The formula for Cougreve's elixir we do not have. (2) For aniline marking-ink see our issue of November 3, 1888, page 637.

25/44. W. F. S.—We make out the Face Powder to be starch, about 5 parts; talc, 3 parts; and zinc oxide, 1 part; coloured with carmine, and perfumed with otto of rose.

31/29. Heather Chinee.—The Chinese smoke Indian and Persian opium. It is subjected to a cooking process in China, as the result of which it comes out in a condition somewhat similar to extract of opium, but of impaired alkaloidal value. The morphia content of the best smoking opium seldom exceeds 9 per cent., and the worst smoking kinds are the best in alkaloid. Extract of opium could be used for smoking. If you refer to The Chemist and Druggist for September 15, 1870, you will find full particulars as to how opium is smoked.

31/37. W. F. H. S.-See reply 20/49 in last issue.

31/62. R. B.—Refer to our advertisement columns for tins, and to a druggists' sundries house for cedar-wood sawdust.

Information Wanted.

[Replies to the following requests are solicited by correspondents of The Chemist and Druggist.]

26,28. Mist. ferri aromat. duplex; how made?

31/50. Where can sunflower oil be procured, in small or large quantities?

(Prepared exclusively from Opium.)

The safest and best preparation of Opium; produces neither headache, sickness, nor constipation.

Dose, the same as that of Tinct. Opii, B.P.

Price 8s. per pound.

In the analysis of 10,000 prescriptions recently published in The Chemist and Druggist, Nepenthe occurred more frequently than any other proprietary article except Vaseline and Chlorodyne.

The word NEPENTHE being registered under the Trade Marks Act, Messrs. FERRIS & CO. have the SOLE RIGHT to use it; and the Trade are respectfully cautioned against any infringement of their Trade Mark NEPENTHE, and the use of any Mark so nearly resembling it as to be calculated to deceive; and against the application of any false trade description, and against any interference with their privilege (see 'Merchandise Marks Act, 1887,' 50 & 51 Vict. ch. 28); and also against dispensing any but Messrs. Ferris & Co.'s preparation when NEPENTHE is ordered in a prescription.

Trade and Wholesale Terms for NEPENTHE upon application.

FERRIS, BOORNE, TOWNSEND & BOUCHER, WHOLESALE AND EXPORT DRUGGISTS, BRISTOL.

FIVE PRIZE MEDALS AWARDED.

VHOUTEN'S GOGA

EASILY DIGESTED — PURE — SOLUBLE — MADE INSTANTLY.

INCOMPARABLY THE BEST AND MOST ECONOMICAL.

Very strong & nutritious, THIS Cocoa is cheaper & more satisfying than Tea.

"Admirable,"

"Admirable,"
"flavour perfect,"
"and SO PURE."

"BRITISH
MEDICAL
"PURE & unmixed,"
"goes a long way."

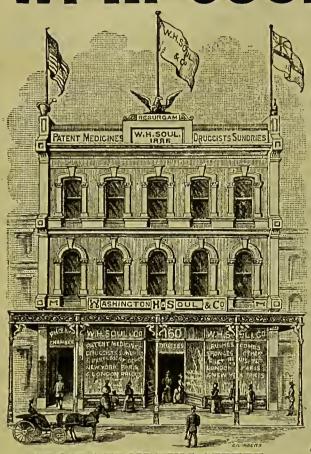
"THE
LANCET.

"ONCE USED, ALWAYS USED."—HEALTH.

SAMPLE TINS GRATIS through your Grocer or Chemist.

NEW SOUTH WALES.

W. H. SOUL & Co.



7 DOORS FROM KING STREET.

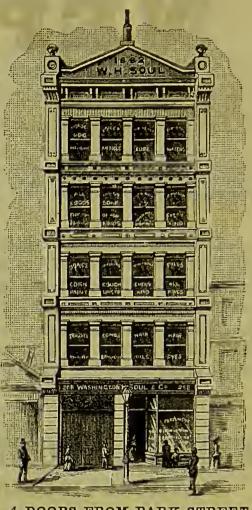
Nos. 158, 160, 162, & 268
PITT STREET,

SYDNEY, N.S.W.

Will be pleased to fill any lines from their large Stock, which the Trade may be unable to obtain from their usual Jobbers.

TERMS CASH.

W. H. S. & Co. can arrange with pushing Houses to receive Goods on Commission for prompt Sale in this Colony.

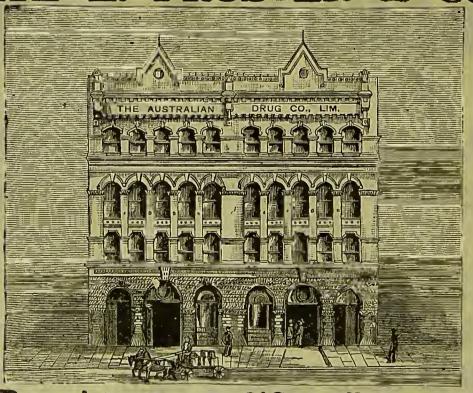


4 DOORS FROM PARK STREET

NEW SOUTH WALES

THE AUSTRALIAN DRUG CO., LIM.,

MPORTERS OF PATENT MEDICINES, DRUGGISTS' SUNDRIES, DYE GOODS, SURGICAL INSTRUMENTS, PERFUMERY, FANCY SOAPS, SPONGES,



MACHINERY, CORKS, BOTTLES, LABELS, PHOTOGRAPHIC CHEMICALS AND MATERIALS.

Wholesale Druggists, 19 & 21 O'Connell Street, SYDNEY.

Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.

London Agents: LAUGHLAND, MACKAY & BAKER, 85 Gracechurch Street, E.C.

NEW ZEALAND.

APRIL 20, 1889.

KEMPTHORNE, PROSSER & CO., NEW ZEALAND DRUG COMPANY, LIMITED,

Wholesale Druggists.

MANUFACTURINO CHEMISTS, AND COMMISSION MERCHANTS, Head Office and Factory, DUNEDIN

BRANCH HOUSES:

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B. G. LENNON & CO., PORT ELIZABETH & EAST LONDON, LENNON & TEBB, CAPE TOWN,

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Steam Refined quality, is in firm, hard, dry and snowy white crystals, entirely free from elly centamination (and therefore of the highest melting point.) As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc. see special circulars to be had experiently pure.

nature which are objected to by some consumers are extracted.

Yokohama,

Commission Merchants, Wholesale Druggists and Manufacturing Chemists.

OTHER SPECIALITIES.

Cod Liver, Fish and Orange Oils, Vegetable Wax and Isinglass. Monthly Market Report and detail eirmitars on application.

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33

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CHEMISTS, DRUGGISTS,

AND

GENERAL MERCHANTS, LUCKNOW, OUDH, INDIA,

Possess exceptional facilities for the introduction of NEW SPECIALITIES, Patent Medicines, Druggists' Sundries, Perfumery, &c.

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BALL, HOBSON & CO.

CHEMISTS, DRUGGISTS, & GENERAL MERCHANTS,

UMBALLA AND KASAULI, PUNJAB,

Established 1844,

Undertake the introduction of Specialities, Patent Medicines, Perfumery. &c., &c. UNITED STATES.

B. KEITH & CO.,

MANUFACTURERS OF

PURE CONCENTRATED MEDICINES,

CONCENTRATED TINCTURES, ETC.

We make a full line of RESINOIDS, such as PODOPHYLLIN, LEPTANDRIN, EUONY-MIN, IRISIN, HYDRASTIN, &c., ALL PURE.

So-called Concentrations are in the market, called by the same name a manufactures, that are made by triturating extracts etc., with sugar of milk. powdered root, etc.

WHAT ARE CONCENTRATED TINCTURES?

They are not made from the crude material, but by dissolving the active principles in Alcohol in definite proportions, and invariably represent a uniform amount of therapeutic power.

Send for printed matter on CON. TINCT. AVENA SATIVA in the Morphia or Opium Habit, and certificates from different members of the Medical Profession, citing cases under their charge, treated by it; also REVISED AND ENLARGED MANUAL; also Price Lists, to

B. KEITH & CO.,
75 WILLIAM STREET NEW YORK, U.S.A.

SALICYLIC ACID

SALICYLATES

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MANUFACTURED BY

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To be obtained through all Wholesale Houses in Great Britain and Ireland and from the SOLE AGENTS,

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THE VEREINIGTE FABRIKEN CHEMISCH-PHARMACEUTISCHER PRODUCTE

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Telegraphic Address-"JOBSTZIMMER FRANKFURTMAIN."

QUININE SULPHATE. Brand Jobst or Zimmer. Whitest and most tulky crystals; utmost purity warranged.

QUININE HYDROCHLORATE. Braudt Jobst or Zimmer. Whitest and most bulky crystals; utmost purity warranted.

ZIMMER'S QUININE PEARLS, in original bottles or boxes of 25, 50, or 100. Each pearl contains 0.1 gr. (=1½ grain) Ohmin sulfur, puriss, c. bisulf, parat.

CINCHONIDINE, CINCHONINE, QUINIDINE, QUINOÏDINE, and all other preparations from Cinchona Bark.

Prices Current of the other Pure Chemicals will be forwarded on application.

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R.QUA ROUG MANUFACTURERS' AGENT, ETC.

(For 13 years with Berkley, Taylor & Co, Wholesale Druggists.)

Approved samples will be received, placed in showroom, and the Colony of Queensland thoroughly worked by competent travellers. Commission to be agreed upon and to be credited on all orders sent directly or indirectly through my efforts.

Consignments received and handled to best advantage. Satisfactory English and Colonial references given.

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VICTORIA.

ROCKE, TOMPSITT WHOLESALE DRUGGISTS, MELBOURNE.

120 LONDON WALL, E.C.

Samples and Quotations solicited.

Agencies undertaken on the most advantageous terms,

Wholesale Depot for Sander & Son's Pure Volatile Eucalyptus Oil (Eucalyptol), and Importers of Oil of Eucalyptus. Wholesale Agents-Messrs. Hodgkinson, Prestons & King, 81 Bishopsgate Street Without, E.C.

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Wholesale Druggists and Manufacturing Chemists,

MELBOURNE, VICTORIA.

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Messrs. GRIMWADE, RUDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street. Wholesale Agents for Bosisto's Genuine Oil of Eucalyptus.

The Mormon Elder's



EVER PRODUCED.

Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, atrengthens and invigorates the BRAIN AND NERVES. A positive oure for IMPOTENCY and Nervous Debility. Prompt, Safe, and Sure. 4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

F. B. CROUCH,

202 Grand Street, New York City; London Depot, 51 Strand, W.C.

Hovenden & Son, Sanger & Son, Barclay & Sons, Edwards & Son, and all Wholesale Druggists.

JULIUS LEVY,

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AGENT FOR

HEINRICH HAENSEL'S Olea ætherea sine terpeno. E. MERCK, Alcaloids and Glucosides. GUSTAV LOHSE, Lily of the Valley Perfumery. ROBERT FRÈRES, Triple Extraits.

Correspondence invited. Special facilities for introducin

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MANUFACTURING CHEMISTS,

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RECOMMEND THEIR

Guaranteed to answer the tests of all authorised authorities, and superior to any made, whilst the price is considerably lower.

DEAR SIRS,

We have received a supply of your "Pure Pepsine Porci," and find that 20 grains dissolve (or digest) three hundred and sixty grains of dry fibrin. This result we consider to be very satisfactory, and we can therefore confidently recommend your preparation.

To Messrs. CLARIDGE & SON, Warwick.

Yours faithfully

SOUTHALL, SON & DYMOND Also eulogised by Dr. LETHEBY in his Lecture before the Society of Arts in London.

PRICES-Pepsine Porci Pur., 2s. per 1 oz.; Pepsine, B.P., 2s. per 1 oz.; Pepsine, best English (Amylated), 30 % pur., 10s. per lb.

*SPECIAL CHARACTERISTICS.—Superior activity in digestive power, purity, freedom from objectionable edour, and good keeping properties have secured for 25 years the confidence and preference for Mossrs. CLARIDGE'S Preparations by the leading London houses. Order direct, or through any London firm or Shipping house. Special discount for 25 ounces and upwards.

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The Oil is supplied in 25-gallon tin-lined casks. Quantities for United States or the Colonies may be shipped direct from Norway if desired.

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MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. QUOTATIONS ON APPLICATION.

SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)

1 part to 5 Sp. Vini Rect. 56 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time.

Price in Winchester Quarts, 3s. per lb., net.

Importers of Cod Liver, Castor, and Olive Oils; Otto de Rose, and all Essential Oils; Valentia Saftron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.

AND ALL PRODUCTS FROM OPIUM.

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ANSWERING ALL THE TESTS OF THE BRITISH PHARMACOPEIA.

ANÆSTHETIC ETHER, ALOIN, BEBEERIN, CHRYSOPHANIC ACID, SALICIN.

MAY BE HAD FROM ALL THE WHOLESALE HOUSES, AND AT

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BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate	of Soda	•••	•••	•••	•••	•••	97'20
Mono Carbo	onate of S	Soda	•••	•••	•••		1'90
Sulphate of	Soda	•••	•••	•••	•••	•••	trace
Chloride of	Sodium	•••	•••	•••	•••	•••	.035
Moisture	•••	•••	•••	•••	•••	•••	.82
Insoluble	•••	•••	•••	•••	•••	•••	nil
	•••					•••	nil

PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers, Bleachers, Dyers; Glass, Paper, and Soap Makers.

SODA CRYSTALS

OF THE FINEST QUALITY.

BRUNNER, MOND & CO., LIM.

Manufacturers of Soda by the Ammonia Process (Solvay's & Mond's Patents),

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PUWELL & CO. SWINDON.

"CUTTING COUNTERACTED." MOONSEED BITTERS brings FULL PRICES.

WHY?

Because every one who retails Moonseed Bitters has to sign an Agreement or Contract in the

following terms:



Oursing phion, Asthma. 2.

Bronchitis Hooping & every other

form of Gugh: Paralysis. Epilepsy. Con-Valsions, framp & Spasms. Cancers. Gevery other Skin & Blood disease. Eis the satest & most certain liver & Indigestion (ure on the earth.



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THE WRAPPER LABEL

of the 2/9 size. It is also sold at 4/6.

MOONSEED OINTMENT.

Retails at $1/1\frac{1}{2}$, 2/9, 4/6 per box.

23 hereby it is mutually agreed between the said parties hereto as follows:—

In consideration of the Vendors selling to and supplying the Purchasers with Moonseed Bitters, Moonseed Ointment, and other preparations manufactured and sold by them (hereinafter termed "the Goods") at their usual prices, the Purchasers will observe and perform the following terms and conditions:—

- 1. The Purchasers to sell the Goods retail for full printed prices only, and for each and every Bottle or Box of Moonseed Bitters, Ointment, or Pills sold by him or them at any less price, without the written consent of the Vendors, the Purchasers shall pay to the Vendors the Sum of Twenty Shillings in the nature of a penalty, to be recoverable as ascertained liquidated damages.
- 2. The Purchasers not to supply any Wholesale House nor to sell the Goods wholesale to any Chemist or Druggist or Medicine Vendor who will not previously enter into an Agreement to retail the same at prices in accordance with the preceding Clause No. 1 of these presents.

All Purchasers who have signed a similar form of Agreement to the foregoing will be supplied upon the Vendors' usual trade terms, but those Purchasers who do not sign a similar form of Agreement to be supplied upon the following terms only, namely:—Retail, 4s.5d. for each and every 4s.6d. Box or Bottle, 2s.8d. for each and every 2s.9d. Box or Bottle, and $1s.0\frac{1}{2}d.$ for each and every $1s.1\frac{1}{2}d.$ Box or Bottle—net in all cases. Wholesale, 4s.4d. for each and every 4s.6d. Box and Bottle, 2s.7d. for each and every 2s.9d. Box or Bottle, and $11\frac{1}{2}d.$ for each and every $1s.1\frac{1}{2}d.$ Box or Bottle—net in all cases. This Agreement and the terms and conditions herein contained to remain in full force and virtue for the term of 7 years from the first day of March, 1889.

As witness the hands of the said parties hereto the day and year first above written.

We call attention to the important steps which we have taken to prevent our specialities being retailed at less than the advertised prices, and we ask the co-operation of the Trade in maintaining the integrity of the scheme whereby the sale of our preparations may always be retained by the legitimate trade. We will not only endeavour, by all means in our power, to prevent the advertised prices being "Cut," but will give Chemists every assistance and facility for making this a large as well as a paying business.

Please write for Terms and Form of Agreement. NOTE that we allow retailers of Moonseed Bitters 2s. 6d. per thousand for the Distribution of Pamphlets.

A. E. POWELL & CO., SWINDON.

WE REPLY TO OUR CRITICS.

The announcement made to the Trade through The Chemist and Druggist on January 26th last immediately absorbed attention, and, as is always the case with novel movements, a little scepticism. For example, some critics tried to knock the bottom out of our scheme by saying that our goods could be obtained through ordinary channels at the ordinary rates. To that we reply that:—The scheme commenced on March 1st, when we hoped all the Wholesale Houses would have their stocks of the MOONSEED BITTERS and OINTMENT exhausted. From that date we start fair, and we shall do our very utmost to prevent cutting and protect the Trade. Recently some Chemists have, through the columns of The Chemist and Druggist, done their best to belittle the scheme which we propose. We HAVE AN ANSWER TO EVERY CRITICISM, and here are a few:—

What Critics say.

- (1) Messrs. Powell's proposals will not help the chemist very much in solving the question as to "retail prices of patents," seeing that the large advertisers could not, if they would, adopt their methods.
- (2) Messrs. Powell's method cannot be adopted by others.
- (3) That traitors will kill the scheme.

Our Reply.

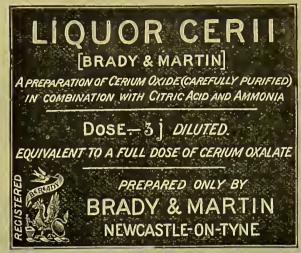
We are among the largest advertisers. We have initiated the method, and if all other makers of Proprietary preparations had done the same in the early days of their success cutting would never have been heard of. What we are anxious to do now is to ensure that every bottle of Moonseed Bitters and every box of Moonseed Ointment will be sold at the full advertised prices. "A little leaven leaveneth the whole." In time all Proprietors of Patent Medicines may adopt our method. Is this not what the trade wants?

We are not particularly anxious to have our original device stolen by our rivals, but there is no reason why they should not adopt a similar scheme, and with the determined support of the trade success is certain.

Our reply to that is short. No traitor survives starvation, and those who violate the bond receive no more supplies. Traitors violated our unstamped papers, and for that reason we threw them open to the trade from June 1888 to March 1889.

We respectfully call the attention of the Drug Trade to the Terms of the Agreement as given on the opposite page, and ask their support in maintaining prices, and in extending the profitable sale of the article.

A. E. POWELL & CO., SWINDON.



82

See Advertisement, January 26, 1889, page 119. Also Circular stating Uses of Cerium, Testimonials, &c., post free on application to Brady & Martin.

Sold only in bottles with BRADY & MARTIN'S Registered Trade Mark on the Label and over the Cork.

8 oz., 16 oz., and 32 oz., each 2/6, 4/, and 7/6.

Physicians are respectfully requested to write on prescriptions—

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& C. E. STUART, B.S. C.

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WHOLESALE DRUGGISTS, MANUFACTURING PHARMACISTS, ANALYTICAL CHEMISTS, AND NEWCASTLE-UPON-TYNE.

Agents_London: EVANS, LESCHER & WEBB, 60 Bartholomew Close, E.C.; S. MAW, SON & THOMPSON, 7 to 11 Aldersgate Street, E.C.; W. EDWARDS & SON 157 Queen Victoria Street, E.C. LEEDS: REYNOLDS & BRANSON, 13 Briggate. LIVERPOOL: EVANS, SONS & CO., 56 Hanover Street.

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JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c. Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

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> "FOR THE BLOOD IS THE LIFE."

ORLD

AND RESTORER. GREAT BLOOD PURIFIER

(Trade Mark-"BLOOD MIXTURE." Registered No. 3275)

The Celebrated CURE FOR Scrofula, Scurvy, Eczema, Blood and Skin Diseases, and Sores of all kinds. Wholesale of all the Wholesale Houses. Usual terms.

Sole Proprietors, THE LINCOLN & MIDLAND COUNTIES' DRUG COMPANY, LINCOLN. Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.

CAUTION.—The Proprietors will take immediate proceedings against all persons pirating their Trade Mark, "Blood Mixture," Labels, Wrappers, &c., or Advertisements, or in any way infringing their rights.

DWARDS

VICTORIA STREET, LONDON. WHOLESALE AND EXPORT DEALERS IN

Patent Medicines and Proprietary Articles,

ENGLISH, AMERICAN, FRENCH, &c.

SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,

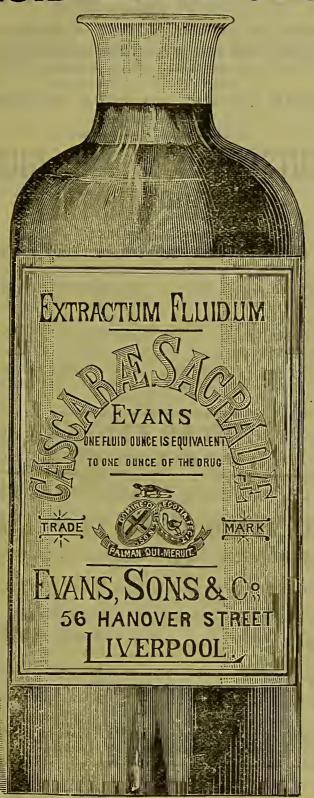
Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers, Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

BOTTLE AND FRONT LABEI

OF

SPECIMEN

EWANS, FLUID EXTRACTS.



Evans' Fluid Extracts are now perfected in our laboratories. They are prepared by elaborate processes, with the menstruum most suited to each individual drug; they contain the whole of the active medicinal properties. Infusions, decoctions, tinctures, wines, and syrups can be obtained from these fluid extracts, by mixing one minim for every grain of the drug. They are put up in actinic glass bottles, of 5, 10, and 20 fluid ounces, capsuled with a large gold front label; a special feature, to assist in dispensing, is the back label, containing full scientific names, botanical origin, description, medical properties, dose, strength, active ingredients, &c.

Complete List and Prices on application

EVANS'

SALINE.

(EFFERVESCING.)

This preparation is a Mixture, in definite proportions, of Chlorate of Potash, English Tartaric Acid, Bicarbonate of Soda, and a little Cane Sugar. The proportion of these ingredients always remains the same. This and the pleasant excess of acid, characterise EVANS' SALINE. mobile powder, dissolving perfectly.

BOTTLES, WITH CHEMISTS' OWN NAME, OR IN BULK.

FIVE NEW ARTISTIC DESIGNS FOR WRAPPERS FOR THE SEASON.

EVANS'

OL. RICINI SINE SAPORE.

(TASTELESS.)

This CASTOR OIL is EXPRESSLY AND SOLELY manufactured for us. It is produced by a process which removes the taste, though not the efficacious properties.

EVANS'

COATED PILL

Pearl coated, readily soluble, prepared in our own laboratory, with best drugs only, such as are used in all Evans' Pharmaceutical Preparations.

EVANS'

INSECT POWDER

Imported and freshly ground at their own mills from Closed Flowers.

In bulk, or in 6d. and 1s. tins, with perforated rotary top.

RECENT MATERIA MEDICA

BY F. HARWOOD LESCHER, F.C.S.

Third Edition.

The characteristics of about 300 of the Drugs and Chemicals recently introduced into Medicine, with their Therapeutics, Authorities, Doses, Formulæ. Among them are full information about Sozoiodol, Pyrodin, Salix Nigra, Pichi, Jacaranda, Terpin, Thallin, Salol, Iodol, Jambul, Pyridin, Doundaké, &c., &c.

Price 2/6, post free 2/8, post free abroad 3/.

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56 HANOVER STREET.

LIVERPOOL:

Canada: EVANS AND SONS (LIMITED), Montreal and Toronto.

Agents: JAMIESON & CO., 263 George St. (opposite Bond St.), Sydney, N.S.W.

The fatal effects frequently following the use of Narcotics in Patent Medicines suggested to the Proprietor of

STEDMAN'S TEETHING POWDERS



the advisability of having his Powders tested by Dr. Hassall, the result of whose analysis is certified below, hence vendors need be under no apprehension of the pain, trouble, and censure connected with most inquests, the occasional result of fatal doses of Patent Medicines.

STEDMAN'S TEETHING POWDERS.

THE ANALYTICAL INSTITUTION,

54 Holborn Viaduct, E.C. London, 29th Nov., 1877.

REPORT ON THE TEETHING POWDER PREPARED BY MR. JAS. STEDMAN, HOXTON.

I hereby certify that I have purchased a sample of STEDMAN'S TEETHING POWDER, and have, at the request of the Proprietor, subjected it to Analysis for Morphia or Opium in any form.

I am enabled to state that I found the sample in question to be absolutely free from Morphia, or any other Alkaloid or constituent of Opium.

Thus STEDMAN'S TEETHING POWDER is favourably distinguished from similar preparations.

ARTHUR H. HASSALL, M.D.

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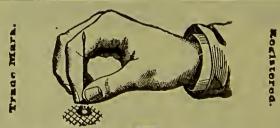
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Squares					28. 6	d. ea	ch.	

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In Summer time, and in warm climates, it is invaluable, as it cools the Blood and improves the system generally.

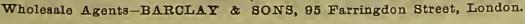
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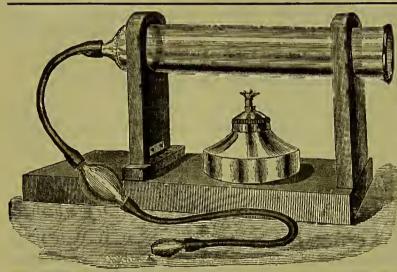
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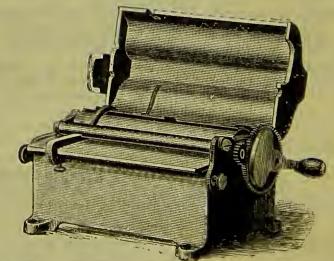
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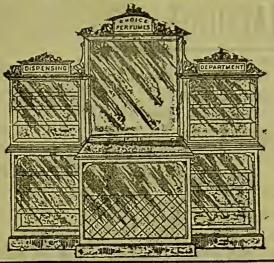
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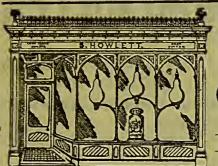
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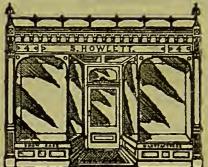
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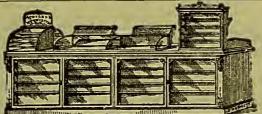
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BLACK, BROWN, LIGHT BROWN, OR GOLDEN.

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No.1. 1s. Od. size ... 7s. Od. per doz. Nets
No.2. 2s. 6d. ,, ... 17s. 6d. ,
No.3. 8s. 6d. , ... 24s. 6d. ,
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BUNION PLASTERS.

For excellent finish and carefully selected White Felt our Plasters will be found equal to the best produced; in adhesiveness and flexibility they surpass all other makers. We make them antiseptic, which is a very valuable

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In glass-top boxes, containing 72 Plasters, oval. square, round, or assorted.

Thin 2/, Thick 2/9 per box.

BUNION PLASTERS ON KID.

Oval, square, or round, in boxes containing 6 Plasters, 2/8 per dozen. Subject to Discount.

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LETTERS PATENT

MARRIOTT'S NEW PATENT, No. 17,135,

NOVEMBER 24th, 1888.

Being an Improved Method of attaching Rings to BABY COMFORTERS, TEETHING PADS, and other articles.

THE "LILY"

BABY COMFORTER

May now be had fitted with

Uncut Bone or Soft Rubber Rings, which will not be liable to break.

Retail at 9d. and 1s., both of superior quality.

The former on cards of 1 dozen assorted patterns.

FOR PATTERNS AND PRICE LIST

See CHEMIST AND DRUGGIST, January 26th, page 64, and March 30th, page 27 (bottom folio).

PATENTEES AND MANUFACTURERS,

E. MARRIOTT & CO

CORN & BUNION PLASTERS.

CORN.	£	s.	d.
Amadouper gross	0	1	10
Ditto, 12 in a boxper doz. boxes	0	2	6
White Felt, per gross, thin, 1/6			
thick	0	2	0
Ditto, 12 in a box, per doz. boxes,			
thin, 2/-, thick	0	2	6
Ditto, 24 in a box (12 each thin and			
thick), per doz. boxes	0	4	6
White Felt, Arnica, per gross, thin, 1/6			
thick	0	2	0
Ditto, 12 in a box, per doz. boxes,			
thin, 2/-, thick	0	2	6
Ditto, 24 in a box (12 each thin and			
thick), per doz. boxes	0	4	6

BUNION.	C	_	a
		s. 4	
Amadouper gross	_		
Ditto, 6 in a boxper doz. boxes	0	3	0
White Felt, per gross, thin, 3/6, thick	0	5	0
Ditto, 6 in a box, per doz. boxes,			
thin, 2/6, thick	0	3	3
Ditto, 12 in a box (6 each thin and			
thick), per doz. boxes	0	5	6
White Felt, Arnica, per gross, thin, 3/6			
thick	0	5	0
Ditto, 6 in a box, per doz. boxes,			
thin, 2/6, thick	0	3	3
Ditto, 12 in a box (6 each thin and			
thick), per doz. boxes	0	5	6

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ED BY OVER

In ONE WEEK three curious uses were reported for which

THE LEICESTER" IMPROVED ADHESIVE PLASTER,

On Fine Flesh-coloured Cambrio,

is found the best, after trying other makes (in the first case, nearly every knowa plaster). A well-known actor said he had the good fortune to meet with it in the Sonth of England, and had inquired for it wherever he went since. It is the only plaster he can find to answer for fixing false hair, &c. A chemist in the North wrote and said a lady violinist would have nothing else; she uses it to make a pad to protect her fingers. A chemist in Yorkshire has a customer who uses plaster to keep his eyes open, and nothing will hold the lids up so well as "The Leicester" Improved Adhesive Plaster on Fine Flesh-coloured Cambric. Surgeons in all parts are frequently commending it. The Syle rapidly increases Surgeons in all parts are frequently commending it. The Sale rapidly increases

Knee Caps, &c., Patent 4,682. No Seams to irritate the Heels and Feet

Stockings, &c.. with
"H" woven in the top
and all articles
stamped "H" are
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OF ALL KINDS.

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SPIRAL LOOM STOCKINGS.

Made from continuous piece of web sewn together.



REGISTERED HOLDFAST.

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TRUSSES OF ALL KINDS.

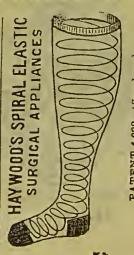
Bath Gloves. Holdfast, Registered Lawn Tennis Cuffs. Anti-rheumatic Knee Caps. Suspensory Bandages. Ladies' and Gents' Belts. Trusses and Belts for Bathing' Athletic Supports for Wrists, Elbows, Knees, and Ankles. Magnetic App lances, Chest-Expanding Braces, Stocking Suspenders, Druggists' Sundries. Lists on application.

PATENT PILE SURGICAL STOCKINGS,

PROTECTED, No. 14,618.

This Invention consists in raising a Pile or Fleece of a Velvety character from the inside of Surgical Appliances, as Stockings, Knee Caps, Belts, Elbow and Shoulder Pieces, &c., which, lying over the Cords of Indiarubber, effectually prevents them indenting the Limb, and produces an equal and more comfortable pressure upon the swollen veins, without effecting the elasticity.

J. H. HAYWOOD, CASTLE GATE, NOTTINGHAM.



EGGI

Patent Pile. Protected, 14,618. The Pile lying over the Indiarubher Cords, protecting them and forming a smooth soft surface to the limb.

MAW'S MENTHOL CONES

REDUCED PRICES.

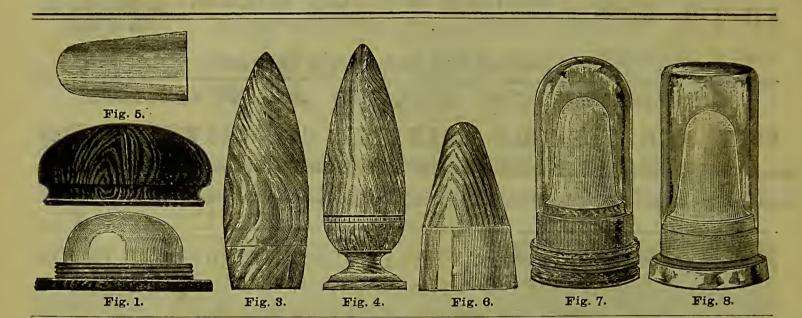


Fig. 1.	In Ebony Cases, flat for the pocket				Per d	loz. 48
	In Boxwood Cases, per doz., $2/9$ and $3/6$; in Vegetable Ivory	•••		•••	194))	48
Fig. 3 & 4.	In Boxwood Cases, per doz., 2/3, 3/9, and 5/-; in Vegetable Ivor	у	•••		***);	4/6 and 5.3
Fig. 5.	In White Opaque Glass Jars with Red Celluloid Caps	•••	•••		*** 37	2/3 and 3/
	Mounted, in Stoppered Bottles		***	•••	,,	6,'-
Fig. 6.	Mounted on Vegetable Ivory, in Glass Bottles, Screw Metal Capa	s	640	100	*** 22	4/3
Fig. 7.	On Boxwood Mounts, Glass Covers		4#3	•••	*** 37	3/- and 4/
	On new Glass Mounts, Glass Covers	•••		Per doz.	3/3, 3/9,	4/6, and 7/6
	On new Earthenware Mounts, Glass Covers			•••	Per doz	. 4/6 and 7/6
Fig. 8.	On Glass Mounts with Glass Covers	194	•••		12	4/- and 5/6

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AND

SAMPLES SENT

ON

APPLICATION.

FEEDING, PICKLE, DRUG, OIL, SAUCE, VINEGAR

BOTTLES.



Feeding.

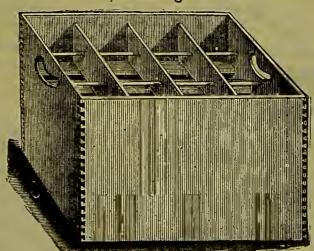
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CARBOLIC POWD

CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or casks.

HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES

Holding 11 lbs. (usual 1/- size); 3/- doz. Ditto, LARGE SIZE (usual 1/6 size), holding about double quantity, 4/8 doz.

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PRIME DALMATIAN. The most energetic Insecticide. Kills Bugs, Fleas, and all offensive Insects. Quite marintess to Domestic Animals. Id., 3c., 6d. and 1s. Tins. Also in 7-lb. Tins and in Kegs of 120 lbs.

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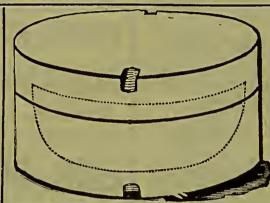
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